



ARCHITECTS

430 Grant Street
Akron, Ohio 44311
330.867.1093
tcarchitects.com

**SPECIFICATIONS
FOR**



YOUNGSTOWN
METROPOLITAN HOUSING AUTHORITY

**VICTORY ESTATES
BATHROOM REHABILITATION**

**690 Magnolia Avenue
Youngstown, Ohio 44505**

**TC PROJECT NO.: 60A25
DATE: March 10, 2026**

BID SOLICITATION

Victory Estates Bathroom Rehabilitation

Contract 26-001

Youngstown Metropolitan Housing Authority invites you to submit a sealed bid proposal for **Victory Estates Bathroom Rehabilitation**. Site address is 690 Magnolia Ave. Youngstown, OH 44505. PROJECT IS SALES TAX EXEMPT.

Bids shall be delivered to YMHA and include the following noted on the envelope “**Sealed Bid 26-001 Victory Estates Bathroom Rehabilitation**”. YMHA will accept proposals at YMHA, Attn: David Martino, 131 W. Boardman St., Youngstown, OH 44503 until **3:00 p.m. local time on Thursday, April 2, 2026**, at which time all proposals shall be publicly tabulated. Late proposals will be rejected. All bids must be made on the bid form provided and include the following:

- A) Contractor Information Form
- B) HUD 5369-A
- C) Non-Collusion Affidavit
- D) Completed Original Bid Form
- E) Completed BABA Bid Form
- F) 10% Bid Bond for the Bid Form which produces the higher sum.
- G) Statement of Qualifications supporting similar work, including references. On contractor letterhead.
- H) HUD 2530

Except as noted, all above forms are included in your specification book.

All bidders shall be aware that the successful bidder will be required to complete all necessary forms to meet YMHA and HUD requirements. Contractor will be required to submit necessary paperwork and certifications including, but not limited to, contract, notice to proceed, contractor profile form, W-9, etc. The successful bidder will be required to provide proof of Workers' Compensation Insurance and adequate levels of General Liability Insurance \$1,000,000 and Automobile Insurance \$1,000,000.

Bid specifications are available beginning March 10, 2026. Contractors must register with YMHA to obtain the bid specification. All addendums and project notifications will be sent by YMHA, therefore registration is required. Questions about the drawings and specifications shall be answered by David Martino, YMHA, Dmartino@ymhaonline.com. All questions must be asked by 5:00pm March 26, 2026 to be considered a part of the bid package.

As indicated on Form HUD-5369, if applicable, a bid bond or certified check for 10% of total bid will be held until contract is entered into. Performance Bond and Payment Bond equal to 100% of contract amount shall be obtained by successful bidder prior to contract signing. Bid and Contract Bond must be certified by surety broker and must be registered and approved by the State of Ohio.

This contract does require compliance with Davis-Bacon Regulations. Refer to HUD-5370 and wage determination in spec.

YMHA reserves the right to review and rate the qualifications, experience, bid history, and past performance of the bidders under their current and past operating names, regardless of low bid. YMHA reserves the right to waive informalities in bidding and reject any, and all bids.

No bid shall be withdrawn for a period of ninety (90) days after the bid opening without documentation and the consent of YMHA.

All sub-contractors, if any, must be approved in writing by YMHA prior to working on site. Sub-contractor request shall include all forms and insurance requirements as required of the general contractor.

YMHA has a goal to award 25% of all contracts to disadvantaged business enterprises (DBEs).

NEW: HUD's new Section 3 regulations are found at 24 CFR Part 75. The complete regulation can be found at:
<https://www.govinfo.gov/content/pkg/FR-2020-09-29/pdf/2020-19185.pdf>

All labor hours provided by the contractor under this contract will need reported to YMHA for purposes of meeting Section 3 reporting requirements. The contractor will be required to provide and work alongside YMHA to identify and track Section 3 labor hours and non-Section 3 labor hours. HUD form 5370 Clause 40 covers Section 3.

Firms including sub-contractors debarred from participating when federal funds are involved cannot participate and will not be considered for contract award. No member, officer or employee of the local authority during his tenure or for one year thereafter shall have any interest, direct or indirect, in this contract or the proceeds thereof.

A non-mandatory, but strongly recommended **pre-bid meeting and walk through** showing of the site is scheduled for **Wednesday, March 18, 2024 at 11:00 a.m.** at the project site.

**SECTION 00 0110
TABLE OF CONTENTS**

DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS

00 0002	Bid Solicitation
00 0110	Table of Contents
00 2113a	Instructions to Bidders Cover Sheet
00 2113b	Instructions to Bidders HUD Form 5369
00 4113a	Bid Form
00 4113b	BABA Bid Form
00 4313	Bid Security Bid Guarantee
00 4343	Prevailing Wage Requirements and Compliance Affidavit
00 4500	Representations and Certifications Cover Sheet HUD Form 5369-A HUD Form 2530
00 4502	Certificate and Release
00 4503	Drug & Alcohol-Free Workplace Certification
00 4504	Equal Employment Opportunity Certification
00 4513	Bidder Qualifications
00 4514a	HUD Section 3 Certification Cover Sheet
00 4514b	HUD Section 3 Certification
00 4515	Affidavit of Minority or Woman-Owned Business
00 4519	Non-Collusion Affidavit
00 5000	Agreement Form Cover Sheet AIA Document A101-2017
00 6613	Request for Interpretation Form
00 7200	General Conditions HUD Form 5370 General Conditions
00 7202	Supervise Payment of Appointing Officer Certificate
00 7203	Waiver of Lien
00 7204	Contractor's Warranty
00 7315	Retainage Requirements
00 7316	ALTERNATE 01: Build America, Buy America (BABA) Requirements

DIVISION 01 - GENERAL REQUIREMENTS

01 1000	General Requirements
01 1100	Summary of Work
01 2100	Allowances
01 2500	Substitution Procedures
01 2600	Contract Modification Procedures
01 2900	Payment Procedures
01 3000	Administrative Requirements
01 3100	Project Management and Coordination
01 3216	Construction Progress Schedule
01 3300	Submittal Procedures
01 4000	Quality Requirements
01 4100	Regulatory Requirements
01 4126	Permit Requirements
01 4216	Definitions
01 4219	Reference Standards
01 5000	Temporary Facilities and Controls
01 6000	Product Requirements
01 7000	Execution and Closeout Requirements
01 7419	Construction Waste Management and Disposal

01 7700 Closeout Procedures
01 7800 Closeout Submittals
01 7823 Operation & Maintenance Data
01 7839 Project Record Documents

DIVISION 02 - EXISTING CONDITIONS – NOT USED

DIVISION 03 – CONCRETE – NOT USED

DIVISION 04 – MASONRY – NOT USED

DIVISION 05 – METALS – NOT USED

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

06 1000 Rough Carpentry
06 1600 Sheathing
06 2023 Interior Finish Carpentry
06 6400 Plastic Paneling

DIVISION 07 THERMAL AND MOISTURE PROTECTION

07 0500 Basic Materials and Methods
07 1416 Fluid-Applied Waterproofing
07 9200 Joint Sealants

DIVISION 08 – OPENINGS – NOT USED

DIVISION 09 – FINISHES

09 0500 Basic Materials and Methods Finishes
09 0561 Flooring Preparation
09 6500 Resilient Flooring
09 9000 Painting
09 9000.1 Painting and Coating (Schedule)

DIVISION 10 – SPECIALTIES

10 2800 Toilet & Bath Accessories
10 5623 Wire Storage Shelving

DIVISION 11 – EQUIPMENT – NOT USED

DIVISION 12 – FURNISHINGS

12 3530 Residential Casework
12 3600 Solid Surface Fabrications

DIVISION 21 – FIRE SUPPRESSION – NOT USED

DIVISION 22 – PLUMBING

See Plumbing Drawings.

DIVISION 23 – HEATING, VENTILATING AND AIR CONDITIONING – NOT USED

DIVISION 26 – ELECTRICAL

See Electrical Drawings.

DIVISION 27 – COMMUNICATIONS – NOT USED

DIVISION 28 – ELECTRONIC SAFETY AND SECURITY– NOT USED

DIVISION 31 – EARTHWORK – NOT USED

DIVISION 32 – EXTERIOR IMPROVEMENTS – NOT USED

DIVISION 33 – UTILITIES – NOT USED

END OF TABLE OF CONTENTS

**SECTION 00 2113a
INSTRUCTIONS TO BIDDERS**

PART 1 – GENERAL

1.1 SUMMARY

- A. The Instructions to Bidders for this Project shall be form HUD-5369 Instructions to Bidders for Contracts, Public and Indian Housing Programs.
- B. Provide 00 4113A Bid Form & 00 4113B BABA Bid Form.
 - a. Bid Bond to be 10% of the higher sum from the (2) bid forms.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION 00 2113a

**U.S. Department of Housing and
Urban Development**
Office of Public and Indian Housing

**Instructions to Bidders for Contracts
Public and Indian Housing Programs**

Instructions to Bidders for Contracts

Public and Indian Housing Programs

Table of Contents

Clause	Page
1. Bid Preparation and Submission	1
2. Explanations and Interpretations to Prospective Bidders	1
3. Amendments to Invitations for Bids	1
4. Responsibility of Prospective Contractor	1
5. Late Submissions, Modifications, and Withdrawal of Bids	1
6. Bid Opening	2
7. Service of Protest	2
8. Contract Award	2
9. Bid Guarantee	3
10. Assurance of Completion	3
11. Preconstruction Conference	3
12. Indian Preference Requirements	3

1. Bid Preparation and Submission

(a) Bidders are expected to examine the specifications, drawings, all instructions, and, if applicable, the construction site (see also the contract clause entitled **Site Investigation and Conditions Affecting the Work** of the *General Conditions of the Contract for Construction*). Failure to do so will be at the bidders' risk.

(b) All bids must be submitted on the forms provided by the Public Housing Agency/Indian Housing Authority (PHA/IHA). Bidders shall furnish all the information required by the solicitation. Bids must be signed and the bidder's name typed or printed on the bid sheet and each continuation sheet which requires the entry of information by the bidder. Erasures or other changes must be initialed by the person signing the bid. Bids signed by an agent shall be accompanied by evidence of that agent's authority. (Bidders should retain a copy of their bid for their records.)

(c) Bidders must submit as part of their bid a completed form HUD-5369-A, "Representations, Certifications, and Other Statements of Bidders."

(d) All bid documents shall be sealed in an envelope which shall be clearly marked with the words "Bid Documents," the Invitation for Bids (IFB) number, any project or other identifying number, the bidder's name, and the date and time for receipt of bids.

(e) If this solicitation requires bidding on all items, failure to do so will disqualify the bid. If bidding on all items is not required, bidders should insert the words "No Bid" in the space provided for any item on which no price is submitted.

(f) Unless expressly authorized elsewhere in this solicitation, alternate bids will not be considered.

(g) Unless expressly authorized elsewhere in this solicitation, bids submitted by telegraph or facsimile (fax) machines will not be considered.

(h) If the proposed contract is for a Mutual Help project (as described in 24 CFR Part 905, Subpart E) that involves Mutual Help contributions of work, material, or equipment, supplemental information regarding the bid advertisement is provided as an attachment to this solicitation.

2. Explanations and Interpretations to Prospective Bidders

(a) Any prospective bidder desiring an explanation or interpretation of the solicitation, specifications, drawings, etc., must request it at least 7 days before the scheduled time for bid opening. Requests may be oral or written. Oral requests must be confirmed in writing. The only oral clarifications that will be provided will be those clearly related to solicitation procedures, i.e., not substantive technical information. No other oral explanation or interpretation will be provided. Any information given a prospective bidder concerning this solicitation will be furnished promptly to all other prospective bidders as a written amendment to the solicitation, if that information is necessary in submitting bids, or if the lack of it would be prejudicial to other prospective bidders.

(b) Any information obtained by, or provided to, a bidder other than by formal amendment to the solicitation shall not constitute a change to the solicitation.

3. Amendments to Invitations for Bids

(a) If this solicitation is amended, then all terms and conditions which are not modified remain unchanged.

(b) Bidders shall acknowledge receipt of any amendment to this solicitation (1) by signing and returning the amendment, (2) by identifying the amendment number and date on the bid form, or (3) by letter, telegram, or facsimile, if those methods are authorized in the solicitation. The PHA/IHA must receive acknowledgement by the time and at the place specified for receipt of bids. Bids which fail to acknowledge the bidder's receipt of any amendment will result in the rejection of the bid if the amendment(s) contained information which substantively changed the PHA's/IHA's requirements.

(c) Amendments will be on file in the offices of the PHA/IHA and the Architect at least 7 days before bid opening.

4. Responsibility of Prospective Contractor

(a) The PHA/IHA will award contracts only to responsible prospective contractors who have the ability to perform successfully under the terms and conditions of the proposed contract. In determining the responsibility of a bidder, the PHA/IHA will consider such matters as the bidder's:

- (1) Integrity;
- (2) Compliance with public policy;
- (3) Record of past performance; and
- (4) Financial and technical resources (including construction and technical equipment).

(b) Before a bid is considered for award, the bidder may be requested by the PHA/IHA to submit a statement or other documentation regarding any of the items in paragraph (a) above. Failure by the bidder to provide such additional information shall render the bidder nonresponsible and ineligible for award.

5. Late Submissions, Modifications, and Withdrawal of Bids

(a) Any bid received at the place designated in the solicitation after the exact time specified for receipt will not be considered unless it is received before award is made and it:

(1) Was sent by registered or certified mail not later than the fifth calendar day before the date specified for receipt of offers (e.g., an offer submitted in response to a solicitation requiring receipt of offers by the 20th of the month must have been mailed by the 15th);

(2) Was sent by mail, or if authorized by the solicitation, was sent by telegram or via facsimile, and it is determined by the PHA/IHA that the late receipt was due solely to mishandling by the PHA/IHA after receipt at the PHA/IHA; or

(3) Was sent by U.S. Postal Service Express Mail Next Day Service - Post Office to Addressee, not later than 5:00 p.m. at the place of mailing two working days prior to the date specified for receipt of proposals. The term "working days" excludes weekends and observed holidays.

(b) Any modification or withdrawal of a bid is subject to the same conditions as in paragraph (a) of this provision.

(c) The only acceptable evidence to establish the date of mailing of a late bid, modification, or withdrawal sent either by registered or certified mail is the U.S. or Canadian Postal Service postmark both on the envelope or wrapper and on the original receipt from the U.S. or Canadian Postal Service. Both postmarks must show a legible date or the bid, modification, or withdrawal shall be processed as if mailed late. "Postmark" means a printed, stamped, or otherwise placed impression (exclusive of a postage meter machine impression) that is readily identifiable without further action as having been supplied and affixed by employees of the U.S. or Canadian Postal Service on the date of mailing. Therefore, bidders should request the postal clerk to place a hand cancellation bull's-eye postmark on both the receipt and the envelope or wrapper.

(d) The only acceptable evidence to establish the time of receipt at the PHA/IHA is the time/date stamp of PHA/IHA on the proposal wrapper or other documentary evidence of receipt maintained by the PHA/IHA.

(e) The only acceptable evidence to establish the date of mailing of a late bid, modification, or withdrawal sent by Express Mail Next Day Service-Post Office to Addressee is the date entered by the post office receiving clerk on the "Express Mail Next Day Service-Post Office to Addressee" label and the postmark on both the envelope or wrapper and on the original receipt from the U.S. Postal Service. "Postmark" has the same meaning as defined in paragraph (c) of this provision, excluding postmarks of the Canadian Postal Service. Therefore, bidders should request the postal clerk to place a legible hand cancellation bull's eye postmark on both the receipt and Failure by a bidder to acknowledge receipt of the envelope or wrapper.

(f) Notwithstanding paragraph (a) of this provision, a late modification of an otherwise successful bid that makes its terms more favorable to the PHA/IHA will be considered at any time it is received and may be accepted.

(g) Bids may be withdrawn by written notice, or if authorized by this solicitation, by telegram (including mailgram) or facsimile machine transmission received at any time before the exact time set for opening of bids; provided that written confirmation of telegraphic or facsimile withdrawals over the signature of the bidder is mailed and postmarked prior to the specified bid opening time. A bid may be withdrawn in person by a bidder or its authorized representative if, before the exact time set for opening of bids, the identity of the person requesting withdrawal is established and the person signs a receipt for the bid.

6. Bid Opening

All bids received by the date and time of receipt specified in the solicitation will be publicly opened and read. The time and place of opening will be as specified in the solicitation. Bidders and other interested persons may be present.

7. Service of Protest

(a) Definitions. As used in this provision:

"Interested party" means an actual or prospective bidder whose direct economic interest would be affected by the award of the contract.

"Protest" means a written objection by an interested party to this solicitation or to a proposed or actual award of a contract pursuant to this solicitation.

(b) Protests shall be served on the Contracting Officer by obtaining written and dated acknowledgement from —

[Contracting Officer designate the official or location where a protest may be served on the Contracting Officer]

(c) All protests shall be resolved in accordance with the PHA's/IHA's protest policy and procedures, copies of which are maintained at the PHA/IHA.

8. Contract Award

(a) The PHA/IHA will evaluate bids in response to this solicitation without discussions and will award a contract to the responsible bidder whose bid, conforming to the solicitation, will be most advantageous to the PHA/IHA considering only price and any price-related factors specified in the solicitation.

(b) If the apparent low bid received in response to this solicitation exceeds the PHA's/IHA's available funding for the proposed contract work, the PHA/IHA may either accept separately priced items (see 8(e) below) or use the following procedure to determine contract award. The PHA/IHA shall apply in turn to each bid (proceeding in order from the apparent low bid to the high bid) each of the separately priced bid deductible items, if any, in their priority order set forth in this solicitation. If upon the application of the first deductible item to all initial bids, a new low bid is within the PHA's/IHA's available funding, then award shall be made to that bidder. If no bid is within the available funding amount, then the PHA/IHA shall apply the second deductible item. The PHA/IHA shall continue this process until an evaluated low bid, if any, is within the PHA's/IHA's available funding. If upon the application of all deductibles, no bid is within the PHA's/IHA's available funding, or if the solicitation does not request separately priced deductibles, the PHA/IHA shall follow its written policy and procedures in making any award under this solicitation.

(c) In the case of tie low bids, award shall be made in accordance with the PHA's/IHA's written policy and procedures.

(d) The PHA/IHA may reject any and all bids, accept other than the lowest bid (e.g., the apparent low bid is unreasonably low), and waive informalities or minor irregularities in bids received, in accordance with the PHA's/IHA's written policy and procedures.

(e) Unless precluded elsewhere in the solicitation, the PHA/IHA may accept any item or combination of items bid.

(f) The PHA/IHA may reject any bid as nonresponsive if it is materially unbalanced as to the prices for the various items of work to be performed. A bid is materially unbalanced when it is based on prices significantly less than cost for some work and prices which are significantly overstated for other work.

(g) A written award shall be furnished to the successful bidder within the period for acceptance specified in the bid and shall result in a binding contract without further action by either party.

9. Bid Guarantee (applicable to construction and equipment contracts exceeding \$25,000)

All bids must be accompanied by a negotiable bid guarantee which shall not be less than five percent (5%) of the amount of the bid. The bid guarantee may be a certified check, bank draft, U.S. Government Bonds at par value, or a bid bond secured by a surety company acceptable to the U.S. Government and authorized to do business in the state where the work is to be performed. In the case where the work under the contract will be performed on an Indian reservation area, the bid guarantee may also be an irrevocable Letter of Credit (see provision 10, Assurance of Completion, below). Certified checks and bank drafts must be made payable to the order of the PHA/IHA. The bid guarantee shall insure the execution of the contract and the furnishing of a method of assurance of completion by the successful bidder as required by the solicitation. Failure to submit a bid guarantee with the bid shall result in the rejection of the bid. Bid guarantees submitted by unsuccessful bidders will be returned as soon as practicable after bid opening.

10. Assurance of Completion

(a) Unless otherwise provided in State law, the successful bidder shall furnish an assurance of completion prior to the execution of any contract under this solicitation. This assurance may be [Contracting Officer check applicable items] —

[] (1) a performance and payment bond in a penal sum of 100 percent of the contract price; or, as may be required or permitted by State law;

[] (2) separate performance and payment bonds, each for 50 percent or more of the contract price;

[] (3) a 20 percent cash escrow;

[] (4) a 25 percent irrevocable letter of credit; or,

[] (5) an irrevocable letter of credit for 10 percent of the total contract price with a monitoring and disbursements agreement with the IHA (applicable only to contracts awarded by an IHA under the Indian Housing Program).

(b) Bonds must be obtained from guarantee or surety companies acceptable to the U.S. Government and authorized to do business in the state where the work is to be performed. Individual sureties will not be considered. U.S. Treasury Circular Number 570, published annually in the Federal Register, lists companies approved to act as sureties on bonds securing Government contracts, the maximum underwriting limits on each contract bonded, and the States in which the company is licensed to do business. Use of companies listed in this circular is mandatory. Copies of the circular may be downloaded on the U.S. Department of Treasury website <http://www.fms.treas.gov/c570/index.html>, or ordered for a minimum fee by contacting the Government Printing Office at (202) 512-2168.

(c) Each bond shall clearly state the rate of premium and the total amount of premium charged. The current power of attorney for the person who signs for the surety company must be attached to the bond. The effective date of the power of attorney shall not precede the date of the bond. The effective date of the bond shall be on or after the execution date of the contract.

(d) Failure by the successful bidder to obtain the required assurance of completion within the time specified, or within such extended period as the PHA/IHA may grant based upon reasons determined adequate by the PHA/IHA, shall render the bidder ineligible for award. The PHA/IHA may then either award the contract to the next lowest responsible bidder or solicit new bids. The PHA/IHA may retain the ineligible bidder's bid guarantee.

11. Preconstruction Conference (applicable to construction contracts)

After award of a contract under this solicitation and prior to the start of work, the successful bidder will be required to attend a preconstruction conference with representatives of the PHA/IHA and its architect/engineer, and other interested parties convened by the PHA/IHA. The conference will serve to acquaint the participants with the general plan of the construction operation and all other requirements of the contract (e.g., Equal Employment Opportunity, Labor Standards). The PHA/IHA will provide the successful bidder with the date, time, and place of the conference.

12. Indian Preference Requirements (applicable only if this solicitation is for a contract to be performed on a project for an Indian Housing Authority)

(a) HUD has determined that the contract awarded under this solicitation is subject to the requirements of section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e(b)). Section 7(b) requires that any contract or subcontract entered into for the benefit of Indians shall require that, to the greatest extent feasible

(1) Preferences and opportunities for training and employment (other than core crew positions; see paragraph (h) below) in connection with the administration of such contracts or subcontracts be given to qualified "Indians." The Act defines "Indians" to mean persons who are members of an Indian tribe and defines "Indian tribe" to mean any Indian tribe, band, nation, or other organized group or community, including any Alaska Native village or regional or village corporation as defined in or established pursuant to the Alaska Native Claims Settlement Act, which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians; and,

(2) Preference in the award of contracts or subcontracts in connection with the administration of contracts be given to Indian organizations and to Indian-owned economic enterprises, as defined in section 3 of the Indian Financing Act of 1974 (25 U.S.C. 1452). That Act defines "economic enterprise" to mean any Indian-owned commercial, industrial, or business activity established or organized for the purpose of profit, except that the Indian ownership must constitute not less than 51 percent of the enterprise; "Indian organization" to mean the governing body of any Indian tribe or entity established or recognized by such governing body; "Indian" to mean any person who is a member of any tribe, band, group, pueblo, or community which is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs and any "Native" as defined in the Alaska Native Claims Settlement Act; and Indian "tribe" to mean any Indian tribe, band, group, pueblo, or community including Native villages and Native groups (including

corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act, which is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs.

(b) (1) The successful Contractor under this solicitation shall comply with the requirements of this provision in awarding all subcontracts under the contract and in providing training and employment opportunities.

(2) A finding by the IHA that the contractor, either (i) awarded a subcontract without using the procedure required by the IHA, (ii) falsely represented that subcontracts would be awarded to Indian enterprises or organizations; or, (iii) failed to comply with the contractor's employment and training preference bid statement shall be grounds for termination of the contract or for the assessment of penalties or other remedies.

(c) If specified elsewhere in this solicitation, the IHA may restrict the solicitation to qualified Indian-owned enterprises and Indian organizations. If two or more (or a greater number as specified elsewhere in the solicitation) qualified Indian-owned enterprises or organizations submit responsive bids, award shall be made to the qualified enterprise or organization with the lowest responsive bid. If fewer than the minimum required number of qualified Indian-owned enterprises or organizations submit responsive bids, the IHA shall reject all bids and readvertise the solicitation in accordance with paragraph (d) below.

(d) If the IHA prefers not to restrict the solicitation as described in paragraph (c) above, or if after having restricted a solicitation an insufficient number of qualified Indian enterprises or organizations submit bids, the IHA may advertise for bids from non-Indian as well as Indian-owned enterprises and Indian organizations. Award shall be made to the qualified Indian enterprise or organization with the lowest responsive bid if that bid is -

(1) Within the maximum HUD-approved budget amount established for the specific project or activity for which bids are being solicited; and

(2) No more than the percentage specified in 24 CFR 905.175(c) higher than the total bid price of the lowest responsive bid from any qualified bidder. If no responsive bid by a qualified Indian-owned economic enterprise or organization is within the stated range of the total bid price of the lowest responsive bid from any qualified enterprise, award shall be made to the bidder with the lowest bid.

(e) Bidders seeking to qualify for preference in contracting or subcontracting shall submit proof of Indian ownership with their bids. Proof of Indian ownership shall include but not be limited to:

(1) Certification by a tribe or other evidence that the bidder is an Indian. The IHA shall accept the certification of a tribe that an individual is a member.

(2) Evidence such as stock ownership, structure, management, control, financing and salary or profit sharing arrangements of the enterprise.

(f) (1) All bidders must submit with their bids a statement describing how they will provide Indian preference in the award of subcontracts. The specific requirements of that statement and the factors to be used by the IHA in determining the statement's adequacy are included as an attachment to this solicitation. Any bid that fails to include the required statement shall be rejected as nonresponsive. The IHA may require that comparable statements be provided by subcontractors to the successful Contractor, and may require the Contractor to reject any bid or proposal by a subcontractor that fails to include the statement.

(2) Bidders and prospective subcontractors shall submit a certification (supported by credible evidence) to the IHA in any instance where the bidder or subcontractor believes it is infeasible to provide Indian preference in subcontracting. The acceptance or rejection by the IHA of the certification shall be final. Rejection shall disqualify the bid from further consideration.

(g) All bidders must submit with their bids a statement detailing their employment and training opportunities and their plans to provide preference to Indians in implementing the contract; and the number or percentage of Indians anticipated to be employed and trained. Comparable statements from all proposed subcontractors must be submitted. The criteria to be used by the IHA in determining the statement(s)'s adequacy are included as an attachment to this solicitation. Any bid that fails to include the required statement(s), or that includes a statement that does not meet minimum standards required by the IHA shall be rejected as nonresponsive.

(h) Core crew employees. A core crew employee is an individual who is a bona fide employee of the contractor at the time the bid is submitted; or an individual who was not employed by the bidder at the time the bid was submitted, but who is regularly employed by the bidder in a supervisory or other key skilled position when work is available. Bidders shall submit with their bids a list of all core crew employees.

(i) Preference in contracting, subcontracting, employment, and training shall apply not only on-site, on the reservation, or within the IHA's jurisdiction, but also to contracts with firms that operate outside these areas (e.g., employment in modular or manufactured housing construction facilities).

(j) Bidders should contact the IHA to determine if any additional local preference requirements are applicable to this solicitation.

(k) The IHA [] does [] does not [Contracting Officer check applicable box] maintain lists of Indian-owned economic enterprises and Indian organizations by specialty (e.g., plumbing, electrical, foundations), which are available to bidders to assist them in meeting their responsibility to provide preference in connection with the administration of contracts and subcontracts.

**SECTION 00 4113a
BID FORM**

TO: Youngstown Metropolitan Housing Authority
131 W. Boardman St.
Youngstown, OH 44503

BID FOR PROJECT:

Victory Estates – Bathroom Rehabilitation
690 Magnolia Ave.
Youngstown, OH 44505

Date Submitted: _____

I, _____ of _____
(Print - Representative) (Print - Name of Firm)

having familiarized with the local conditions affecting the cost of the work, and with the Bid Documents (including Bid Solicitation, Instructions to Bidders, this Bid Form, the Form of Non-Collusive Affidavit, the Form of Contract, the General Conditions, the Special Conditions, the general Scope of Work, the Technical Specifications and the Drawings) and Addenda, if any thereto, as prepared by TC Architects, Inc., Akron, OH and on file in that office, hereby proposes to furnish all labor, materials, equipment and services required to construct and complete the entire project for the following sum(s).

Having read and examined the Bidding Documents, including without limitation the Bidding and Contracting Requirements, Drawings, and Specifications, prepared by the Architect for the above-referenced Project, and the following Addenda:

Addendum No.	Date of Receipt
_____	_____
_____	_____
_____	_____

the undersigned Bidder proposes to execute the Contract, in accordance with the Bidding Documents, as follows:

PART 1 - TOTAL BASE BID: (Including Allowances)

GENERAL CONTRACTOR - Labor and materials for the Sum of:

_____ Dollars
(Sum in Words)

\$ _____
(Sum in Numerals)

PART 2 – ALTERNATES

ALTERNATE 01:

Meet BABA (Build America, Buy America) requirements for the project.
See Section 00 4113b BABA Bid Form.

PART 3 – ALLOWANCES (NOT USED)

PART 4 – UNIT PRICES

In the space provided state the unit cost per square foot to be used to calculate the amount to be added to or deducted from the base bid for each item. Refer to the Drawings for descriptions.

Replacement cost of electrical panel	\$ _____	each
Replacement cost per SF of Subfloor	\$ _____	per SF
Replacement cost of linear ft of floor joist	\$ _____	per lf

PART 5 – TIME OF ACCEPTANCE

The Undersigned agrees not to withdraw or modify this Bid for a period of **(90) Ninety Days** following the Bid Due Date and Time stated above.

_____ Initial

PART 6 – SCHEDULE AND CONTRACT COMPLETION

The Bidder, if awarded a Contract, will complete the Work described in the Contract Documents within **365 Calendar Days** following a written authorization to proceed.

In the event all Work is not completed within the period of time noted above, the Owner shall be entitled to retain or recover from the Contractor, as liquidated damages, and not as a penalty, the amounts set forth in the following table for each and every calendar day thereafter until Substantial Completion. It is expressly understood and agreed that the liquidated damages set forth below represent compensation for damages sustained as the result of delay in performance only and shall be an addition to such damage. The Owner is entitled to recover as the result of a breach of any other term, condition, or warranty under the contract.

LIQUIDATED DAMAGES

<u>Contract Amount</u>	<u>Dollars Per Day</u>
\$1.00 to \$50,000.00	\$150.00
\$50,000.01 to \$150,000.00	\$250.00
\$150,000.01 to \$500,000.00	\$500.00
\$500,001.00 to \$2,000,000.00	\$1,000.00
\$2,000,000.01 to \$5,000,000.00	\$2,000.00
\$5,000,000.01 to \$10,000,000.00	\$2,500.00
\$10,000,000.01 or more	\$3,000.00

_____ Initials

PART 7 – BIDDER’S CERTIFICATION - GENERAL

The Bidder hereby acknowledges the following:

1. Bidder has read and understands the Bidding Documents and agrees to comply with the requirements of the Bidding Documents.
2. Bidder is familiar with local conditions and has correlated first-hand observations with the requirements of the Project. The Bidder has no outstanding questions regarding the interpretation or clarification of the Bidding Documents.
3. The Bidder and each person signing on behalf of the Bidder certifies, and in the case of a joint or combined bid, each party thereto certifies as to such party's organization, under penalty of perjury, that to the best of the undersigned's knowledge and belief: (a) the Bid has been arrived at independently without collusion, consultation, communication or agreement, for the purpose of restricting competition as to any matter relating to such Base Bid with any other Bidder; (b) unless otherwise required by law, the Base Bid and any Alternates have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder prior to the bid opening, directly or indirectly, to any other Bidder who would have any interest in the Bid; (c) no attempt has been made or will be made by the Bidder to induce any other individual, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.
4. Bidder certifies that the upon the award of a Contract, the Contractor will make a good faith effort to ensure that all of the Contractor's employees, while working, will not purchase, transfer, use or possess illegal drugs or alcohol or abuse prescription drugs in any way.
5. Bidder agrees to furnish any information requested by the Owner to evaluate the responsibility of the Bidder.
6. Bidder has included in the bid any costs associated with a 10% Bid Bond, and a 100% Performance and Payment Bond.

Initial

PART 8 – BIDDER’S CERTIFICATION – YOUNGSTOWN MHA

1. In submitting this Bid, the undersigned Bidder acknowledges that the Youngstown MHA reserves the right to reject any and all bids. If written notice of the acceptance of this bid is mailed within ninety (90) Calendar days after the opening thereof, or at any time thereafter before this bid is withdrawn by the Bidder, the Bidder agrees to execute and deliver a contract in the prescribed form and furnish the required bond within ten (10) Calendar days after the Contract is presented to it for signature.
2. The undersigned Bidder certifies that no federal taxes, excise taxes, or state or local taxes have been included in the Base Bid Sum herein quoted.
3. Acceptance Period: The Bid shall be irrevocable after the public opening and cannot be withdrawn for a period of **ninety (90) days thereafter**. If this Bid is withdrawn within the stated period or if the undersigned Bidder fails to execute the Contract and provide satisfactory bind within ten (10) days following written notice from the Housing Authority, the bid security shall be forfeited to Youngstown MHA as liquidated damages.
4. Has this firm, or any principal(s) ever been debarred from providing any services by the Federal Government, any state government, the State of Ohio, or any local government agency within or without the State of Ohio? Yes No If "Yes," please attach a full detailed explanation, including dates, circumstances, and current status.
5. The following executed documents are attached to this bid:
 - Bid Security - Bond or Specified Acceptable Alternative
 - Form HUD 5369-A Representations, Certifications, and Other Statements of Bidders
 - Form HUD 2530 Previous Participation Certification
 - Form HUD 5369 Instructions to Bidders for Contracts
 - Drug- and Alcohol-Free Workplace Affidavit
 - Equal Employment Opportunity Certification
 - Bidder Qualification Statement
 - HUD Section 3 Certification
 - Affidavit of Minority or Woman-Owned Business
 - Non-Collusion Affidavit

Note: The penalty for making false statements in offers is prescribed in 18 U.W.C.1001.

Initial _____

PART 9 – SIGNATURES

Bidder's Name and
Authorized Signature:

Print Name:

Title:

Company Name:

Mailing Address:

Telephone Number:

Facsimile Number:

E-Mail Address:

Where Incorporated:

Federal Identification Number:

Contact person for Contract processing:

(please print)

ADDITIONAL SIGNATURE FOR JOINT VENTURE

Bidder's Name and
Authorized Signature:

Print Name:

Title:

Company Name:

Mailing Address:

Telephone Number:

Facsimile Number:

E-Mail Address:

Where Incorporated:

Federal Identification Number:

Contact person for Contract processing:

END OF BID FORM

**SECTION 00 4113b
BABA BID FORM**

TO: Youngstown Metropolitan Housing Authority
131 W. Boardman St.
Youngstown, OH 44503

BID FOR PROJECT:
Victory Estates – Bathroom Rehabilitation
690 Magnolia Ave.
Youngstown, OH 44505

Date Submitted: _____

I, _____ of _____
(Print - Representative) (Print - Name of Firm)

having familiarized with the local conditions affecting the cost of the work, and with the Bid Documents (including Bid Solicitation, Instructions to Bidders, this Bid Form, the Form of Non-Collusive Affidavit, the Form of Contract, the General Conditions, the Special Conditions, the general Scope of Work, the Technical Specifications and the Drawings) and Addenda, if any thereto, as prepared by TC Architects, Inc., Akron, OH and on file in that office, hereby proposes to furnish all labor, materials, equipment and services required to construct and complete the entire project for the following sum(s).

Having read and examined the Bidding Documents, including without limitation the Bidding and Contracting Requirements, Drawings, and Specifications, prepared by the Architect for the above-referenced Project, and the following Addenda:

Addendum No.	Date of Receipt
_____	_____
_____	_____
_____	_____

the undersigned Bidder proposes to execute the Contract, in accordance with the Bidding Documents, as follows:

PART 1 - TOTAL BASE BID: (Including Allowances)

GENERAL CONTRACTOR - Labor and materials for the Sum of:

_____ Dollars
(Sum in Words)

\$ _____
(Sum in Numerals)

PART 2 – ALTERNATES

ALTERNATE 01:

Meet BABA (Build America, Buy America) requirements for the project.
See Section 00 4113b BABA Bid Form.

PART 3 – ALLOWANCES (NOT USED)

PART 4 – UNIT PRICES

In the space provided state the unit cost per square foot to be used to calculate the amount to be added to or deducted from the base bid for each item. Refer to the Drawings for descriptions.

Replacement cost of electrical panel	\$ _____	each
Replacement cost per SF of Subfloor	\$ _____	per SF
Replacement cost of linear ft of floor joist	\$ _____	per lf

PART 5 – TIME OF ACCEPTANCE

The Undersigned agrees not to withdraw or modify this Bid for a period of **(90) Ninety Days** following the Bid Due Date and Time stated above.

_____ Initial

PART 6 – SCHEDULE AND CONTRACT COMPLETION

The Bidder, if awarded a Contract, will complete the Work described in the Contract Documents within **365 calendar days** following a written authorization to proceed.

In the event all Work is not completed within the period of time noted above, the Owner shall be entitled to retain or recover from the Contractor, as liquidated damages, and not as a penalty, the amounts set forth in the following table for each and every calendar day thereafter until Substantial Completion. It is expressly understood and agreed that the liquidated damages set forth below represent compensation for damages sustained as the result of delay in performance only and shall be an addition to such damage. The Owner is entitled to recover as the result of a breach of any other term, condition, or warranty under the contract.

LIQUIDATED DAMAGES

<u>Contract Amount</u>	<u>Dollars Per Day</u>
\$1.00 to \$50,000.00	\$150.00
\$50,000.01 to \$150,000.00	\$250.00
\$150,000.01 to \$500,000.00	\$500.00
\$500,001.00 to \$2,000,000.00	\$1,000.00
\$2,000,000.01 to \$5,000,000.00	\$2,000.00
\$5,000,000.01 to \$10,000,000.00	\$2,500.00
\$10,000,000.01 or more	\$3,000.00

_____ Initials

PART 7 – BIDDER’S CERTIFICATION - GENERAL

The Bidder hereby acknowledges the following:

1. Bidder has read and understands the Bidding Documents and agrees to comply with the requirements of the Bidding Documents.
2. Bidder is familiar with local conditions and has correlated first-hand observations with the requirements of the Project. The Bidder has no outstanding questions regarding the interpretation or clarification of the Bidding Documents.
3. The Bidder and each person signing on behalf of the Bidder certifies, and in the case of a joint or combined bid, each party thereto certifies as to such party's organization, under penalty of perjury, that to the best of the undersigned's knowledge and belief: (a) the Bid has been arrived at independently without collusion, consultation, communication or agreement, for the purpose of restricting competition as to any matter relating to such Base Bid with any other Bidder; (b) unless otherwise required by law, the Base Bid and any Alternates have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder prior to the bid opening, directly or indirectly, to any other Bidder who would have any interest in the Bid; (c) no attempt has been made or will be made by the Bidder to induce any other individual, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.
4. Bidder certifies that the upon the award of a Contract, the Contractor will make a good faith effort to ensure that all of the Contractor's employees, while working, will not purchase, transfer, use or possess illegal drugs or alcohol or abuse prescription drugs in any way.
5. Bidder agrees to furnish any information requested by the Owner to evaluate the responsibility of the Bidder.
6. Bidder has included in the bid any costs associated with a 10% Bid Bond, and a 100% Performance and Payment Bond.

Initial

PART 8 – BIDDER’S CERTIFICATION – YOUNGSTOWN MHA

1. In submitting this Bid, the undersigned Bidder acknowledges that the Youngstown MHA reserves the right to reject any and all bids. If written notice of the acceptance of this bid is mailed within ninety (90) Calendar days after the opening thereof, or at any time thereafter before this bid is withdrawn by the Bidder, the Bidder agrees to execute and deliver a contract in the prescribed form and furnish the required bond within ten (10) Calendar days after the Contract is presented to it for signature.
2. The undersigned Bidder certifies that no federal taxes, excise taxes, or state or local taxes have been included in the Base Bid Sum herein quoted.
3. Acceptance Period: The Bid shall be irrevocable after the public opening and cannot be withdrawn for a period of **ninety (90) days thereafter**. If this Bid is withdrawn within the stated period or if the undersigned Bidder fails to execute the Contract and provide satisfactory bond within ten (10) days following written notice from the Housing Authority, the bid security shall be forfeited to Youngstown MHA as liquidated damages.
4. Has this firm, or any principal(s) ever been debarred from providing any services by the Federal Government, any state government, the State of Ohio, or any local government agency within or without the State of Ohio? Yes No If "Yes," please attach a full detailed explanation, including dates, circumstances, and current status.
5. In submitting this Bid, the undersigned bidder thereby agrees that by receipt of a contract award, it shall be the responsibility of the successful bidder to agree, certify, and eventually show proof that the work and products provided and installed by the contractor are in full compliance with the requirements of the Build America, Buy America Act.
6. The following executed documents are attached to this bid:
 - Bid Security - Bond or Specified Acceptable Alternative
 - Form HUD 5369-A Representations, Certifications, and Other Statements of Bidders
 - Form HUD 2530 Previous Participation Certification
 - Form HUD 5369 Instructions to Bidders for Contracts
 - Drug- and Alcohol-Free Workplace Affidavit
 - Equal Employment Opportunity Certification
 - Bidder Qualification Statement
 - HUD Section 3 Certification

- Affidavit of Minority or Woman-Owned Business
- Non-Collusion Affidavit

Note: The penalty for making false statements in offers is prescribed in 18 U.W.C.1001.

_____ Initial

PART 9 – SIGNATURES

Bidder's Name and Authorized Signature: _____

Print Name: _____

Title: _____

Company Name: _____

Mailing Address: _____

Telephone Number: _____

Facsimile Number: _____

E-Mail Address: _____

Where Incorporated: _____

Federal Identification Number: _____

Contact person for Contract processing: _____
(please print)

ADDITIONAL SIGNATURE FOR JOINT VENTURE

Bidder's Name and Authorized Signature: _____

Print Name: _____

Title: _____

Company Name: _____

Mailing Address: _____

Telephone Number: _____

Facsimile Number: _____

E-Mail Address: _____

Where Incorporated: _____

Federal Identification Number: _____

Contact person for Contract processing: _____

END OF BABA BID FORM

**SECTION 00 4313
BID SECURITY**

Bids shall be accompanied by valid Bid Security as described in the Ohio Revised Code Section 153.54 Bid guaranty to be filed with bid, as follows:

(A) Except with respect to a contract described in section 9.334 or 153.693 of the Revised Code, each person bidding for a contract with the state or any political subdivision, district, institution, or other agency thereof, excluding therefrom the department of transportation, for any public improvement shall file with the bid, a bid guaranty in the form of either:

- (1) A bond in accordance with division (B) of this section for the full amount of the bid;
- (2) A certified check, cashier's check, or letter of credit pursuant to Chapter 1305. of the Revised Code, in accordance with division (C) of this section. Any such letter of credit is revocable only at the option of the beneficiary state, political subdivision, district, institution, or agency. The amount of the certified check, cashier's check, or letter of credit shall be as specified in HUD-5369 Instructions to Bidders for Contracts, Public and Indian Housing Programs.

(B) A bid guaranty filed pursuant to division (A)(1) of this section shall be conditioned to:

- (1) Provide that, if the bid is accepted, the bidder, after the awarding or the recommendation for the award of the contract, whichever the contracting authority designates, will enter into a proper contract in accordance with the bid, plans, details, and specifications. If for any reason, other than as authorized by section 9.31 of the Revised Code or division (G) of this section, the bidder fails to enter into the contract, and the contracting authority awards the contract to the next lowest bidder, the bidder and the surety on the bidder's bond are liable to the state, political subdivision, district, institution, or agency for the difference between the bid and that of the next lowest bidder, or for a penal sum not to exceed ten per cent of the amount of the bond, whichever is less. If the state, political subdivision, district, institution, or agency does not award the contract to the next lowest bidder but resubmits the project for bidding, the bidder failing to enter into the contract and the surety on the bidder's bond, except as provided in division (G) of this section, are liable to the state, political subdivision, district, institution, or agency for a penal sum not to exceed ten per cent of the amount of the bid or the costs in connection with the resubmission of printing new contract documents, required advertising, and printing and mailing notices to prospective bidders, whichever is less.
- (2) Indemnify the state, political subdivision, district, institution, or agency against all damage suffered by failure to perform the contract according to its provisions and in accordance with the plans, details, and specifications therefor and to pay all lawful claims of subcontractors, material suppliers, and laborers for labor performed or material furnished in carrying forward, performing, or completing the contract; and agree and assent that this undertaking is for the benefit of any subcontractor, material supplier, or laborer having a just claim, as well as for the state, political subdivision, district, institution, or agency.

(C)

- (1) A bid guaranty filed pursuant to division (A)(2) of this section shall be conditioned to provide that if the bid is accepted, the bidder, after the awarding or the recommendation for the award of the contract, whichever the contracting authority designates, will enter into a proper contract in accordance with the bid, plans, details, specifications, and bills of material. If for any reason, other than as authorized by section 9.31 of the Revised Code or division (G) of this section, the bidder fails to enter into the contract, and the contracting authority awards the contract to the next lowest bidder, the bidder is liable to the state, political subdivision, district, institution, or agency for the difference between the bidder's bid and that of the next lowest bidder, or for a penal sum not to exceed ten per cent of the amount of the bid, whichever is less. If the state, political subdivision, district, institution, or agency does not award the contract to the next lowest bidder but resubmits the project for bidding, the bidder failing to enter into the contract, except as provided in division (G) of this section, is liable to the state, political subdivision, district, institution, or agency for a penal sum not to exceed ten per cent of the amount of the bid or the costs in connection with the

resubmission, of printing new contract documents, required advertising, and printing and mailing notices to prospective bidders, whichever is less.

If the bidder enters into the contract, the bidder, at the time the contract is entered to, shall file a bond for the amount of the contract to indemnify the state, political subdivision, district, institution, or agency against all damage suffered by failure to perform the contract according to its provisions and in accordance with the plans, details, and specifications and to pay all lawful claims of subcontractors, material suppliers, and laborers for labor performed or material furnished in carrying forward, performing, or completing the contract; and agree and assent that this undertaking is for the benefit of any subcontractor, material supplier, or laborer having a just claim, as well as for the state, political subdivision, district, institution, or agency.

- (2) A construction manager who enters into a contract pursuant to sections 9.33 to 9.333 of the Revised Code, if required by the public authority at the time the construction manager enters into the contract, shall file a letter of credit pursuant to Chapter 1305. of the Revised Code, bond, certified check, or cashier's check, for the value of the construction management contract to indemnify the state, political subdivision, district, institution, or agency against all damage suffered by the construction manager's failure to perform the contract according to its provisions, and shall agree and assent that this undertaking is for the benefit of the state, political subdivision, district, institution, or agency. A letter of credit provided by the construction manager is revocable only at the option of the beneficiary state, political subdivision, district, institution, or agency.

(D) Where the state, political subdivision, district, institution, or agency accepts a bid but the bidder fails or refuses to enter into a proper contract in accordance with the bid, plans, details, and specifications within ten days after the awarding of the contract, the bidder and the surety on any bond, except as provided in division (G) of this section, are liable for the amount of the difference between the bidder's bid and that of the next lowest bidder, but not in excess of the liability specified in division (B)(1) or (C) of this section. Where the state, political subdivision, district, institution, or agency then awards the bid to such next lowest bidder and such next lowest bidder also fails or refuses to enter into a proper contract in accordance with the bid, plans, details, and specifications within ten days after the awarding of the contract, the liability of such next lowest bidder, except as provided in division (G) of this section, is the amount of the difference between the bids of such next lowest bidder and the third lowest bidder, but not in excess of the liability specified in division (B)(1) or (C) of this section. Liability on account of an award to any lowest bidder beyond the third lowest bidder shall be determined in like manner.

(E) Notwithstanding division (C) of this section, where the state, political subdivision, district, institution, or agency resubmits the project for bidding, each bidder whose bid was accepted but who failed or refused to enter into a proper contract, except as provided in division (G) of this section, is liable for an equal share of a penal sum in connection with the resubmission, of printing new contract documents, required advertising, and printing and mailing notices to prospective bidders, but no bidder's liability shall exceed the amount of the bidder's bid guaranty.

(F) All bid guaranties filed pursuant to this section shall be payable to the state, political subdivision, district, institution, or agency, be for the benefit of the state, political subdivision, district, institution, or agency or any person having a right of action thereon, and be deposited with, and held by, the board, officer, or agent contracting on behalf of the state, political subdivision, district, institution, or agency. All bonds filed pursuant to this section shall be issued by a surety company authorized to do business in this state as surety approved by the board, officer, or agent awarding the contract on behalf of the state, political subdivision, district, institution, or agency.

(G) A bidder for a contract with the state or any political subdivision, district, institution, or other agency thereof, excluding therefrom the Ohio department of transportation, for a public improvement costing less than one-half million dollars may withdraw the bid from consideration if the bidder's bid for some other contract with the state or any political subdivision, district, institution, or other agency thereof, excluding therefrom the department of transportation, for the public improvement costing less than one-half million dollars has already been accepted, if the bidder certifies in good faith that the total amount of all the bidder's current contracts is less than one-half million dollars, and if the surety certifies in good faith that the bidder

is unable to perform the subsequent contract because to do so would exceed the bidder's bonding capacity. If a bid is withdrawn under authority of this division, the contracting authority may award the contract to the next lowest bidder or reject all bids and resubmit the project for bidding, and neither the bidder nor the surety on the bidder's bond are liable for the difference between the bidder's bid and that of the next lowest bidder, for a penal sum, or for the costs of printing new contract documents, required advertising, and printing and mailing notices to prospective bidders.

(H) Bid guaranties filed pursuant to division (A) of this section shall be returned to all unsuccessful bidders immediately after the contract is executed. The bid guaranty filed pursuant to division (A)(2) of this section shall be returned to the successful bidder upon filing of the bond required in division (C) of this section.

(I) For the purposes of this section, "next lowest bidder" means, in the case of a political subdivision that has adopted the model Ohio and United States preference requirements promulgated pursuant to division (E) of section 125.11 of the Revised Code, the next lowest bidder that qualifies under those preference requirements.

(J) For the purposes of this section and sections 153.56 , 153.57 , and 153.571 of the Revised Code, "public improvement," "subcontractor," "material supplier," "laborer," and "materials" have the same meanings as in section 1311.25 of the Revised Code.

Amended by 129th General Assembly File No. 28, HB 153, §101.01, eff. 9/29/2011.

Effective Date: 11-24-1995; 03-30-2007

END OF SECTION 00 4313

153.54 Bid guaranty to be filed with bid.

(A) Except with respect to a contract described in section [9.334](#) or [153.693](#) of the Revised Code, each person bidding for a contract with the state or any political subdivision, district, institution, or other agency thereof, excluding therefrom the department of transportation, for any public improvement shall file with the bid, a bid guaranty in the form of either:

(1) A bond in accordance with division (B) of this section for the full amount of the bid;

(2) A certified check, cashier's check, or letter of credit pursuant to Chapter 1305. of the Revised Code, in accordance with division (C) of this section. Any such letter of credit is revocable only at the option of the beneficiary state, political subdivision, district, institution, or agency. The amount of the certified check, cashier's check, or letter of credit shall be equal to ten per cent of the bid.

(B) A bid guaranty filed pursuant to division (A)(1) of this section shall be conditioned to:

(1) Provide that, if the bid is accepted, the bidder, after the awarding or the recommendation for the award of the contract, whichever the contracting authority designates, will enter into a proper contract in accordance with the bid, plans, details, and specifications. If for any reason, other than as authorized by section [9.31](#) of the Revised Code or division (G) of this section, the bidder fails to enter into the contract, and the contracting authority awards the contract to the next lowest bidder, the bidder and the surety on the bidder's bond are liable to the state, political subdivision, district, institution, or agency for the difference between the bid and that of the next lowest bidder, or for a penal sum not to exceed ten per cent of the amount of the bond, whichever is less. If the state, political subdivision, district, institution, or agency does not award the contract to the next lowest bidder but resubmits the project for bidding, the bidder failing to enter into the contract and the surety on the bidder's bond, except as provided in division (G) of this section, are liable to the state, political subdivision, district, institution, or agency for a penal sum not to exceed ten per cent of the amount of the bid or the costs in connection with the resubmission of printing new contract documents, required advertising, and printing and mailing notices to prospective bidders, whichever is less.

(2) Indemnify the state, political subdivision, district, institution, or agency against all damage suffered by failure to perform the contract according to its provisions and in accordance with the plans, details, and specifications therefor and to pay all lawful claims of subcontractors, material suppliers, and laborers for labor performed or material furnished in carrying forward, performing, or completing the contract; and agree and assent that this undertaking is for the benefit of any subcontractor, material supplier, or laborer having a just claim, as well as for the state, political subdivision, district, institution, or agency.

(C)

(1) A bid guaranty filed pursuant to division (A)(2) of this section shall be conditioned to provide that if the bid is accepted, the bidder, after the awarding or the recommendation for the award of the contract, whichever the contracting authority designates, will enter into a proper contract in accordance with the bid, plans, details, specifications, and bills of material. If for any reason, other than as authorized by section [9.31](#) of the Revised Code or division (G) of this section, the bidder fails to enter into the contract, and the contracting authority awards the contract to the next lowest bidder, the bidder is liable to the state, political subdivision, district, institution, or agency for the difference between the bidder's bid and that of the next lowest bidder, or for a penal sum not to exceed ten per

cent of the amount of the bid, whichever is less. If the state, political subdivision, district, institution, or agency does not award the contract to the next lowest bidder but resubmits the project for bidding, the bidder failing to enter into the contract, except as provided in division (G) of this section, is liable to the state, political subdivision, district, institution, or agency for a penal sum not to exceed ten per cent of the amount of the bid or the costs in connection with the resubmission, of printing new contract documents, required advertising, and printing and mailing notices to prospective bidders, whichever is less.

If the bidder enters into the contract, the bidder, at the time the contract is entered to, shall file a bond for the amount of the contract to indemnify the state, political subdivision, district, institution, or agency against all damage suffered by failure to perform the contract according to its provisions and in accordance with the plans, details, and specifications and to pay all lawful claims of subcontractors, material suppliers, and laborers for labor performed or material furnished in carrying forward, performing, or completing the contract; and agree and assent that this undertaking is for the benefit of any subcontractor, material supplier, or laborer having a just claim, as well as for the state, political subdivision, district, institution, or agency.

(2) A construction manager who enters into a contract pursuant to sections [9.33](#) to [9.333](#) of the Revised Code, if required by the public authority at the time the construction manager enters into the contract, shall file a letter of credit pursuant to Chapter 1305. of the Revised Code, bond, certified check, or cashier's check, for the value of the construction management contract to indemnify the state, political subdivision, district, institution, or agency against all damage suffered by the construction manager's failure to perform the contract according to its provisions, and shall agree and assent that this undertaking is for the benefit of the state, political subdivision, district, institution, or agency. A letter of credit provided by the construction manager is revocable only at the option of the beneficiary state, political subdivision, district, institution, or agency.

(D) Where the state, political subdivision, district, institution, or agency accepts a bid but the bidder fails or refuses to enter into a proper contract in accordance with the bid, plans, details, and specifications within ten days after the awarding of the contract, the bidder and the surety on any bond, except as provided in division (G) of this section, are liable for the amount of the difference between the bidder's bid and that of the next lowest bidder, but not in excess of the liability specified in division (B)(1) or (C) of this section. Where the state, political subdivision, district, institution, or agency then awards the bid to such next lowest bidder and such next lowest bidder also fails or refuses to enter into a proper contract in accordance with the bid, plans, details, and specifications within ten days after the awarding of the contract, the liability of such next lowest bidder, except as provided in division (G) of this section, is the amount of the difference between the bids of such next lowest bidder and the third lowest bidder, but not in excess of the liability specified in division (B)(1) or (C) of this section. Liability on account of an award to any lowest bidder beyond the third lowest bidder shall be determined in like manner.

(E) Notwithstanding division (C) of this section, where the state, political subdivision, district, institution, or agency resubmits the project for bidding, each bidder whose bid was accepted but who failed or refused to enter into a proper contract, except as provided in division (G) of this section, is liable for an equal share of a penal sum in connection with the resubmission, of printing new contract documents, required advertising, and printing and mailing notices to prospective bidders, but no bidder's liability shall exceed the amount of the bidder's bid guaranty.

(F) All bid guaranties filed pursuant to this section shall be payable to the state, political subdivision, district, institution, or agency, be for the benefit of the state, political subdivision, district, institution, or agency or any person having a right of action thereon, and be deposited with, and held by, the board, officer, or agent contracting on behalf of the state, political subdivision, district, institution, or agency. All bonds filed pursuant to this section shall be issued by a surety company authorized to do business in this state as surety approved by the board, officer, or agent awarding the contract on behalf of the state, political subdivision, district, institution, or agency.

(G) A bidder for a contract with the state or any political subdivision, district, institution, or other agency thereof, excluding therefrom the Ohio department of transportation, for a public improvement costing less than one-half million dollars may withdraw the bid from consideration if the bidder's bid for some other contract with the state or any political subdivision, district, institution, or other agency thereof, excluding therefrom the department of transportation, for the public improvement costing less than one-half million dollars has already been accepted, if the bidder certifies in good faith that the total amount of all the bidder's current contracts is less than one-half million dollars, and if the surety certifies in good faith that the bidder is unable to perform the subsequent contract because to do so would exceed the bidder's bonding capacity. If a bid is withdrawn under authority of this division, the contracting authority may award the contract to the next lowest bidder or reject all bids and resubmit the project for bidding, and neither the bidder nor the surety on the bidder's bond are liable for the difference between the bidder's bid and that of the next lowest bidder, for a penal sum, or for the costs of printing new contract documents, required advertising, and printing and mailing notices to prospective bidders.

(H) Bid guaranties filed pursuant to division (A) of this section shall be returned to all unsuccessful bidders immediately after the contract is executed. The bid guaranty filed pursuant to division (A)(2) of this section shall be returned to the successful bidder upon filing of the bond required in division (C) of this section.

(I) For the purposes of this section, "next lowest bidder" means, in the case of a political subdivision that has adopted the model Ohio and United States preference requirements promulgated pursuant to division (E) of section [125.11](#) of the Revised Code, the next lowest bidder that qualifies under those preference requirements.

(J) For the purposes of this section and sections [153.56](#), [153.57](#), and [153.571](#) of the Revised Code, "public improvement," "subcontractor," "material supplier," "laborer," and "materials" have the same meanings as in section [1311.25](#) of the Revised Code.

Amended by 129th General Assembly File No. 28, HB 153, §101.01, eff. 9/29/2011.

Effective Date: 11-24-1995; 03-30-2007

**SECTION 00 4343
PREVAILING WAGE REQUIREMENTS AND COMPLIANCE AFFIDAVIT**

PART 1 – GENERAL

1.1 SUMMARY

- A. Section includes requirements for prevailing wage rates for the Project.

1.2 PAYMENT OF PREVAILING WAGE RATES

- A. The Contractor shall pay the Davis Bacon wage rates of the Project locality, as issued by the Department of Labor, to laborers and mechanics performing Work on the Project.
- B. The Contractor shall comply with the provisions, duties, and related obligations of the Davis Bacon Act.
- C. The Contractor shall submit all payroll reports in compliance with the requirements of paragraph 1.4 for all of the employees of the Contractor and of the Contractor's Subcontractors.
- D. By executing a Contract, the Contractor certifies that it based its Bid upon the required prevailing rates of wages.

1.3 PREVAILING WAGE RATE REVISIONS

- A. The Contracting Authority shall, within 7 business days after receipt of a notice of a change in the prevailing wage rates, notify the Contractor of the change. The prevailing wage rates are available at the Department of Labor website (<http://www.sam.gov/>). The Contractor shall pay any revised wage rates issued during the term of the Contract if scope of work is added.

1.4 PAYROLL SCHEDULE

- A. Within 10 days of the date of the Notice to Proceed, the Contractor shall provide the Contracting Authority's Prevailing Wage Coordinator a schedule of dates during the term of the Contract on which wages shall be paid to employees for the Project.

1.5 PAYROLL REPORTS

- A. The Contractor shall submit payroll reports with each Contractor Payment Request, which reports shall be certified by the Contractor that the payroll is correct and complete and the wage rates shown are not less than those required by the Contract. The Contractor is responsible for submitting all payroll reports of its Subcontractors.
1. Each payroll report shall indicate the period covered and include a list containing the name, address and social security number of each employee of the Contractor and its Subcontractors paid for the Work.
 2. Each payroll report shall list the number of hours each employee worked each day on the Project during the reporting period, the total hours each week on the Project, the employee's hourly rate of pay, job classification, hourly rate of fringe benefits, and all deductions from wages and net pay.
 3. Each payroll report shall list each fringe benefit and state if it is paid as cash to the employee or to a named plan.
 4. For each employee, each payroll report shall list the employee's gender and ethnicity, classified as Black, Hispanic, Asian Pacific Islanders, American Indians/Alaskan Native or non-minority.
 5. The Contractor and its Subcontractors shall submit apprenticeship agreements for all apprentices utilized on the Project.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION 00 4343

AFFIDAVIT OF COMPLIANCE / PREVAILING WAGES

(Contractor is required to submit this with the final pay request and/or request to release escrow)

The undersigned certifies that the Contractor, all Subcontractors and Material Suppliers have fully complied with the requirements of the US Department of Labor and that the wages paid to employees of

_____ (Company Name)

for all hours worked on the _____ (Project name and location)

project, during the period from _____

to _____ are in compliance with the cited prevailing wage requirements. I further certify that no rebates or deductions have been or will be made, directly or indirectly, from any wages paid in connection with this project, other than those provided by law.

(Signature of Officer or Agent) (Date)

AFFIDAVIT OF CONTRACTOR

Affiant further certifies that all Subcontractors and Material Suppliers have been paid in full for all Work performed or materials furnished for the Project (check below if applicable):

- except such amounts as will be paid from the estimate now due.
- except those liens which the Contractor previously disputed and resolved with the Owner by providing a Bond pursuant to Section 1311.311 ORC and has served a notice to commence suit to the lien claimant.

**SECTION 00 4500
REPRESENTATIONS AND CERTIFICATIONS**

PART 1 – GENERAL

1.1 SUMMARY

- A. Prepare and submit the following forms and certifications as required attachments to the Bid Form:
1. HUD-5369-A Representations, Certifications, and Other Statements of Bidders.
 2. HUD -2530 Previous Participation Certification.
 3. Youngstown MHA Drug Free & Alcohol-Free Workplace Policy.
 4. Equal Employment Opportunity/Affirmative Action Policy Statement.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION 00 4500

**U.S. Department of Housing
and Urban Development**
Office of Public and Indian Housing

**Representations, Certifications,
and Other Statements of Bidders**
Public and Indian Housing Programs

Representations, Certifications, and Other Statements of Bidders

Public and Indian Housing Programs

Table of Contents

Clause	Page
1. Certificate of Independent Price Determination	1
2. Contingent Fee Representation and Agreement	1
3. Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions	1
4. Organizational Conflicts of Interest Certification	2
5. Bidder's Certification of Eligibility	2
6. Minimum Bid Acceptance Period	2
7. Small, Minority, Women-Owned Business Concern Representation	2
8. Indian-Owned Economic Enterprise and Indian Organization Representation	2
9. Certification of Eligibility Under the Davis-Bacon Act	3
10. Certification of Nonsegregated Facilities	3
11. Clean Air and Water Certification	3
12. Previous Participation Certificate	3
13. Bidder's Signature	3

1. Certificate of Independent Price Determination

(a) The bidder certifies that--

(1) The prices in this bid have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other bidder or competitor relating to (i) those prices, (ii) the intention to submit a bid, or (iii) the methods or factors used to calculate the prices offered;

(2) The prices in this bid have not been and will not be knowingly disclosed by the bidder, directly or indirectly, to any other bidder or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a competitive proposal solicitation) unless otherwise required by law; and

(3) No attempt has been made or will be made by the bidder to induce any other concern to submit or not to submit a bid for the purpose of restricting competition.

(b) Each signature on the bid is considered to be a certification by the signatory that the signatory--

(1) Is the person in the bidder's organization responsible for determining the prices being offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) above; or

(2) (i) Has been authorized, in writing, to act as agent for the following principals in certifying that those principals have not participated, and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) above.

_____ [insert full name of person(s) in the bidder's organization responsible for determining the prices offered in this bid or proposal, and the title of his or her position in the bidder's organization];

(ii) As an authorized agent, does certify that the principals named in subdivision (b)(2)(i) above have not participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) above; and

(iii) As an agent, has not personally participated, and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) above.

(c) If the bidder deletes or modifies subparagraph (a)2 above, the bidder must furnish with its bid a signed statement setting forth in detail the circumstances of the disclosure.

[] [Contracting Officer check if following paragraph is applicable]

(d) Non-collusive affidavit. (applicable to contracts for construction and equipment exceeding \$50,000)

(1) Each bidder shall execute, in the form provided by the PHA/IHA, an affidavit to the effect that he/she has not colluded with any other person, firm or corporation in regard to any bid submitted in response to this solicitation. If the successful bidder did not submit the affidavit with his/her bid, he/she must submit it within three (3) working days of bid opening. Failure to submit the affidavit by that date may render the bid nonresponsive. No contract award will be made without a properly executed affidavit.

(2) A fully executed "Non-collusive Affidavit" [] is, [] is not included with the bid.

2. Contingent Fee Representation and Agreement

(a) Definitions. As used in this provision:

"Bona fide employee" means a person, employed by a bidder and subject to the bidder's supervision and control as to time, place, and manner of performance, who neither exerts, nor proposes to exert improper influence to solicit or obtain contracts nor holds out as being able to obtain any contract(s) through improper influence.

"Improper influence" means any influence that induces or tends to induce a PHA/IHA employee or officer to give consideration or to act regarding a PHA/IHA contract on any basis other than the merits of the matter.

(b) The bidder represents and certifies as part of its bid that, except for full-time bona fide employees working solely for the bidder, the bidder:

(1) [] has, [] has not employed or retained any person or company to solicit or obtain this contract; and

(2) [] has, [] has not paid or agreed to pay to any person or company employed or retained to solicit or obtain this contract any commission, percentage, brokerage, or other fee contingent upon or resulting from the award of this contract.

(c) If the answer to either (a)(1) or (a)(2) above is affirmative, the bidder shall make an immediate and full written disclosure to the PHA/IHA Contracting Officer.

(d) Any misrepresentation by the bidder shall give the PHA/IHA the right to (1) terminate the contract; (2) at its discretion, deduct from contract payments the amount of any commission, percentage, brokerage, or other contingent fee; or (3) take other remedy pursuant to the contract.

3. Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions (applicable to contracts exceeding \$100,000)

(a) The definitions and prohibitions contained in Section 1352 of title 31, United States Code, are hereby incorporated by reference in paragraph (b) of this certification.

(b) The bidder, by signing its bid, hereby certifies to the best of his or her knowledge and belief as of December 23, 1989 that:

(1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with the awarding of a contract resulting from this solicitation;

(2) If any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with this solicitation, the bidder shall complete and submit, with its bid, OMB standard form LLL, "Disclosure of Lobbying Activities;" and

(3) He or she will include the language of this certification in all subcontracts at any tier and require that all recipients of subcontract awards in excess of \$100,000 shall certify and disclose accordingly.

(c) Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by section 1352, title 31, United States Code. Any person who makes an expenditure prohibited under this provision or who fails to file or amend the disclosure form to be filed or amended by this provision, shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000, for each such failure.

(d) Indian tribes (except those chartered by States) and Indian organizations as defined in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450B) are exempt from the requirements of this provision.

4. Organizational Conflicts of Interest Certification

The bidder certifies that to the best of its knowledge and belief and except as otherwise disclosed, he or she does not have any organizational conflict of interest which is defined as a situation in which the nature of work to be performed under this proposed contract and the bidder's organizational, financial, contractual, or other interests may, without some restriction on future activities:

- (a) Result in an unfair competitive advantage to the bidder; or,
- (b) Impair the bidder's objectivity in performing the contract work.

[] In the absence of any actual or apparent conflict, I hereby certify that to the best of my knowledge and belief, no actual or apparent conflict of interest exists with regard to my possible performance of this procurement.

5. Bidder's Certification of Eligibility

(a) By the submission of this bid, the bidder certifies that to the best of its knowledge and belief, neither it, nor any person or firm which has an interest in the bidder's firm, nor any of the bidder's subcontractors, is ineligible to:

(1) Be awarded contracts by any agency of the United States Government, HUD, or the State in which this contract is to be performed; or,

(2) Participate in HUD programs pursuant to 24 CFR Part 24.

(b) The certification in paragraph (a) above is a material representation of fact upon which reliance was placed when making award. If it is later determined that the bidder knowingly rendered an erroneous certification, the contract may be terminated for default, and the bidder may be debarred or suspended from participation in HUD programs and other Federal contract programs.

6. Minimum Bid Acceptance Period

(a) "Acceptance period," as used in this provision, means the number of calendar days available to the PHA/IHA for awarding a contract from the date specified in this solicitation for receipt of bids.

(b) This provision supersedes any language pertaining to the acceptance period that may appear elsewhere in this solicitation.

(c) The PHA/IHA requires a minimum acceptance period of [Contracting Officer insert time period] calendar days.

(d) In the space provided immediately below, bidders may specify a longer acceptance period than the PHA's/IHA's minimum requirement. The bidder allows the following acceptance period: calendar days.

(e) A bid allowing less than the PHA's/IHA's minimum acceptance period will be rejected.

(f) The bidder agrees to execute all that it has undertaken to do, in compliance with its bid, if that bid is accepted in writing within (1) the acceptance period stated in paragraph (c) above or (2) any longer acceptance period stated in paragraph (d) above.

7. Small, Minority, Women-Owned Business Concern Representation

The bidder represents and certifies as part of its bid/ offer that it --

(a) [] is, [] is not a small business concern. "Small business concern," as used in this provision, means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding, and qualified as a small business under the criteria and size standards in 13 CFR 121.

(b) [] is, [] is not a women-owned business enterprise. "Women-owned business enterprise," as used in this provision, means a business that is at least 51 percent owned by a woman or women who are U.S. citizens and who also control and operate the business.

(c) [] is, [] is not a minority business enterprise. "Minority business enterprise," as used in this provision, means a business which is at least 51 percent owned or controlled by one or more minority group members or, in the case of a publicly owned business, at least 51 percent of its voting stock is owned by one or more minority group members, and whose management and daily operations are controlled by one or more such individuals. For the purpose of this definition, minority group members are:

(Check the block applicable to you)

- [] Black Americans [] Asian Pacific Americans
- [] Hispanic Americans [] Asian Indian Americans
- [] Native Americans [] Hasidic Jewish Americans

8. Indian-Owned Economic Enterprise and Indian Organization Representation (applicable only if this solicitation is for a contract to be performed on a project for an Indian Housing Authority)

The bidder represents and certifies that it:

(a) [] is, [] is not an Indian-owned economic enterprise. "Economic enterprise," as used in this provision, means any commercial, industrial, or business activity established or organized for the purpose of profit, which is at least 51 percent Indian owned. "Indian," as used in this provision, means any person who is a member of any tribe, band, group, pueblo, or community which is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs and any "Native" as defined in the Alaska Native Claims Settlement Act.

(b) [] is, [] is not an Indian organization. "Indian organization," as used in this provision, means the governing body of any Indian tribe or entity established or recognized by such governing body. Indian "tribe" means any Indian tribe, band, group, pueblo, or

community including Native villages and Native groups (including corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act, which is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs.

9. Certification of Eligibility Under the Davis-Bacon Act (applicable to construction contracts exceeding \$2,000)

(a) By the submission of this bid, the bidder certifies that neither it nor any person or firm who has an interest in the bidder's firm is a person or firm ineligible to be awarded contracts by the United States Government by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(b) No part of the contract resulting from this solicitation shall be subcontracted to any person or firm ineligible to be awarded contracts by the United States Government by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(c) The penalty for making false statements is prescribed in the U. S. Criminal Code, 18 U.S.C. 1001.

10. Certification of Nonsegregated Facilities (applicable to contracts exceeding \$10,000)

(a) The bidder's attention is called to the clause entitled **Equal Employment Opportunity** of the General Conditions of the Contract for Construction.

(b) "Segregated facilities," as used in this provision, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin because of habit, local custom, or otherwise.

(c) By the submission of this bid, the bidder certifies that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The bidder agrees that a breach of this certification is a violation of the Equal Employment Opportunity clause in the contract.

(d) The bidder further agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) prior to entering into subcontracts which exceed \$10,000 and are not exempt from the requirements of the Equal Employment Opportunity clause, it will:

- (1) Obtain identical certifications from the proposed subcontractors;
- (2) Retain the certifications in its files; and
- (3) Forward the following notice to the proposed subcontractors (except if the proposed subcontractors have submitted identical certifications for specific time periods):

Notice to Prospective Subcontractors of Requirement for Certifications of Nonsegregated Facilities

A Certification of Nonsegregated Facilities must be submitted before the award of a subcontract exceeding \$10,000 which is not exempt from the provisions of the Equal Employment Opportunity clause of the prime contract. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semiannually, or annually).

Note: The penalty for making false statements in bids is prescribed in 18 U.S.C. 1001.

11. Clean Air and Water Certification (applicable to contracts exceeding \$100,000)

The bidder certifies that:

(a) Any facility to be used in the performance of this contract [] is, [] is not listed on the Environmental Protection Agency List of Violating Facilities:

(b) The bidder will immediately notify the PHA/IHA Contracting Officer, before award, of the receipt of any communication from the Administrator, or a designee, of the Environmental Protection Agency, indicating that any facility that the bidder proposes to use for the performance of the contract is under consideration to be listed on the EPA List of Violating Facilities; and,

(c) The bidder will include a certification substantially the same as this certification, including this paragraph (c), in every nonexempt subcontract.

12. Previous Participation Certificate (applicable to construction and equipment contracts exceeding \$50,000)

(a) The bidder shall complete and submit with his/her bid the Form HUD-2530, "Previous Participation Certificate." If the successful bidder does not submit the certificate with his/her bid, he/she must submit it within three (3) working days of bid opening. Failure to submit the certificate by that date may render the bid nonresponsive. No contract award will be made without a properly executed certificate.

(b) A fully executed "Previous Participation Certificate" [] is, [] is not included with the bid.

13. Bidder's Signature

The bidder hereby certifies that the information contained in these certifications and representations is accurate, complete, and current.

(Signature and Date)

(Typed or Printed Name)

(Title)

(Company Name)

(Company Address)

US Department of Housing and Urban Development
Office of Housing/Federal Housing Commissioner

US Department of Agriculture
Farmers Home Administration

Part I to be completed by Controlling Participant(s) of Covered Projects (See instructions) Reason for submission:		For HUD HQ/FmHA use only	
1. Agency name and City where the application is filed		2. Project Name, Project Number, City and Zip Code	
3. Loan or Contract amount \$	4. Number of Units or Beds	5. Section of Act	6. Type of Project (check one) <input type="checkbox"/> Existing <input type="checkbox"/> Rehabilitation <input type="checkbox"/> Proposed (New)

7. List all proposed Controlling Participants and attach complete organization chart for all organizations showing ownership %

Name and address (Last, First, Middle Initial) of controlling participant(s) proposing to participate	8 Role of Each Principal in Project	9. SSN or IRS Employer Number (TIN)

1. Schedule A contains a listing, for the last ten years, of every project assisted or insured by HUD, USDA FmHA and/or State and local government housing finance agencies in which the controlling participant(s) have participated or are now participating.
 2. For the period beginning 10 years prior to the date of this certification, and except as shown on the certification:
 - a. No mortgage on a project listed has ever been in default, assigned to the Government or foreclosed, nor has it received mortgage relief from the mortgagee;
 - b. The controlling participants have no defaults or noncompliance under any Conventional Contract or Turnkey Contract of Sale in connection with a public housing project;
 - c. There are no known unresolved findings as a result of HUD audits, management reviews or other Governmental investigations concerning the controlling participants or their projects;
 - d. There has not been a suspension or termination of payments under any HUD assistance contract due to the controlling participant's fault or negligence;
 - e. The controlling participants have not been convicted of a felony and are not presently the subject of a complaint or indictment charging a felony. (A felony is defined as any offense punishable by imprisonment for a term exceeding one year, but does not include any offense classified as a misdemeanor under the laws of a State and punishable by imprisonment of two years or less);
 - f. The controlling participants have not been suspended, debarred or otherwise restricted by any Department or Agency of the Federal Government or of a State Government from doing business with such Department or Agency;
 - g. The controlling participants have not defaulted on an obligation covered by a surety or performance bond and have not been the subject of a claim under an employee fidelity bond;
 3. All the names of the controlling participants who propose to participate in this project are listed above.
 4. None of the controlling participants is a HUD/FmHA employee or a member of a HUD/FmHA employee's immediate household as defined in Standards of Ethical Conduct for Employees of the Executive Branch in 5 C.F.R. Part 2635 (57 FR 35006) and HUD's Standard of Conduct in 24 C.F.R. Part 0 and USDA's Standard of Conduct in 7 C.F.R. Part 0 Subpart B.
 5. None of the controlling participants is a participant in an assisted or insured project as of this date on which construction has stopped for a period in excess of 20 days or which has been substantially completed for more than 90 days and documents for closing, including final cost certification, have not been filed with HUD or FmHA.
 6. None of the controlling participants have been found by HUD or FmHA to be in noncompliance with any applicable fair housing and civil rights requirements in 24 CFR 5.105(a). (If any controlling participants have been found to be in noncompliance with any requirements, attach a signed statement explaining the relevant facts, circumstances, and resolution, if any).
 7. None of the controlling participants is a Member of Congress or a Resident Commissioner nor otherwise prohibited or limited by law from contracting with the Government of the United States of America.
 8. Statements above (if any) to which the controlling participant(s) cannot certify have been deleted by striking through the words with a pen, and the controlling participant(s) have initialed each deletion (if any) and have attached a true and accurate signed statement (if applicable) to explain the facts and circumstances.
- I/We, the undersigned, certify under penalty of perjury that the information provided above is true and correct. WARNING: Anyone who knowingly submits a false claim or makes a false statement is subject to criminal and/or civil penalties, including confinement for up to 5 years, fines, and civil and administrative penalties. (18 U.S.C. §§ 287, 1001, 1010, 1012, 1014; 31 U.S.C. §3729, 3802).

Name of Controlling Participant	Signature of Controlling Participant	Certification Date (mm/dd/yyyy)	Area Code and Tel. No.
This form prepared by (print name)			Area Code and Tel. No.

Schedule A: List of Previous Projects and Section 8 Contracts. Below is a complete list of the controlling participants' previous participation projects and participation history in covered projects as per 24 CFR, part 200 §200.214 and multifamily Housing programs of FmHA, State and local Housing Finance Agencies, if applicable. **Note:** Read and follow the instruction sheet carefully. Make full disclosure. Add extra sheets if you need more space. Double check for accuracy. If no previous projects, write by your name, "No previous participation, First Experience".

1. Controlling Participants' Name (Last, First)	2. List of previous projects (Project name, project ID and, Govt. agency involved)	3. List Participants' Role(s) (indicate dates participated, and if fee or identity of interest participant)	4. Status of loan (current, defaulted, assigned, foreclosed)	5. Was the Project ever in default during your participation Yes No If yes, explain		6. Last MOR rating and Physical Insp. Score and date	

Part II- For HUD Internal Processing Only

Received and checked by me for accuracy and completeness; recommend approval or refer to Headquarters after checking appropriate box.

Date (mm/dd/yyyy)	Tel No. and area code	<input type="checkbox"/> A. No adverse information; form HUD-2530 approval recommended. <input type="checkbox"/> B. Name match in system <input type="checkbox"/> C. Disclosure or Certification problem <input type="checkbox"/> D. Other (attach memorandum)	
Staff	Processing and Control		
Signature of authorized reviewer	Signature of authorized reviewer	Approved <input type="checkbox"/> Yes <input type="checkbox"/> No	Date (mm/dd/yyyy)

Instructions for Completing the Previous Participation Certificate, form HUD-2530

Carefully read these instructions and the applicable regulations. A copy of the regulations published at 24 C.F.R. part 200, subpart H, § 200.210-200.222 can be obtained on-line at www.gpo.gov and from the Account Executive at any HUD Office. Type or print neatly in ink when filling out this form. Incomplete form will be returned to the applicant.

Attach extra sheets as you need them. Be sure to indicate "Continued on Attachments" wherever appropriate. Sign each additional page that you attach if it refers to you or your record. **Carefully read the certification before you sign it.** Any questions regarding the form or how to complete it can be answered by your HUD Account Executive.

Purpose: This form provides HUD/USDA FmHA with a certified report of all previous participation in relevant HUD/USDA programs by those parties submitting the application. The information requested in this form is used by HUD/USDA to determine if you meet the standards established to ensure that all controlling participants in HUD/USDA projects will honor their legal, financial and contractual obligations and are of acceptable risks from the underwriting standpoint of an insurer, lender or governmental agency. HUD requires that you certify and submit your record of previous participation, in relevant projects, by completing and signing this form, before your participation can be approved.

HUD approval of your certification is a necessary precondition for your participation in the project and in the capacity that you propose. If you do not file this certification, do not furnish the information requested accurately, or do not meet established standards, HUD will not approve your certification.

Note that approval of your certification does not obligate HUD to approve your project application, and it does not satisfy all other HUD program requirements relative to your qualifications.

Who Must Sign and File Form HUD-2530: Form HUD-2530 must be completed and signed by all Controlling Participants of Covered Projects, as such terms are defined in 24 CFR part 200 §200.212, and as further clarified by the Processing Guide (HUD notice H 2016-15) referenced in 24 CFR §200.210(b) and available on the HUD website at: http://portal.hud.gov/hudportal/HUD?src=/program_offices/housing/mfh/prevparticipation.

Where and When Form HUD-2530 Must Be Filed: The original of this form must be submitted to the HUD Office where your project application will be processed at the same time you file your initial project application. This form must be filed with applications for projects listed in 24 CFR §200.214 and for the Triggering Events listed at 24 CFR §200.218.

Review of Adverse Determination: If approval of your participation in a HUD project is denied, withheld, or conditionally granted on the basis of your record of previous participation, you will be notified by the HUD Office. You may request reconsideration in accordance with 24 CFR §200.222 and further clarified by the Processing Guide. Request must be made in writing within 30 days from your receipt of the notice of determination.

The Department of Housing and Urban Development (HUD) is authorized to collect this information by law 42 U.S.C. 3535(d) and by regulation at 24 CFR 200.210. This information is needed so that principals applying to participate in multifamily programs can become HUD-approved controlling participants. The information you provide will enable HUD to evaluate your record with respect to established standards of performance, responsibility and eligibility. Without prior approval, a controlling participant may not participate in a proposed or existing multifamily or healthcare project. HUD uses this information to evaluate whether or not controlling participants pose an unsatisfactory underwriting risk. The information is used to evaluate the potential controlling participants and approve only individuals and organizations that will honor their legal, financial and contractual obligations.

Privacy Act Statement: The Housing and Community Development Act of 1987, 42 U.S.C. 3543 requires persons applying for a Federally-insured or guaranteed loan to furnish his/her Social Security Number (SSN). HUD must have your SSN for identification of your records. HUD may use your SSN for automated processing of your records and to make requests for information about you and your previous records with other public agencies and private sector sources. HUD may disclose certain information to Federal, State and local agencies when relevant to civil, criminal, or regulatory investigations and prosecutions. It will not be otherwise disclosed or released outside of HUD, except as required and permitted by law. You must provide all of the information requested in this application, including your SSN. Failure to provide any of the information will result in your disapproval of participation in this HUD program. APPS SORN could be accessed in Federal Register / Vol. 81, No. 146 / Friday, July 29, 2016 / Notices ([Docket No. FR-5921-N-10] Implementation of the Privacy Act of 1974, as Amended; Amended System of Records Notice, Active Partners Performance System).

PRA Statement: The public reporting burden is estimated at 3 hours per response, including the time for reviewing instructions, searching existing data sources, gathering, and maintaining the data needed, and completing and reviewing the collection of information.

Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions to reduce this burden, to the Reports Management Officer, Paperwork Reduction Project, to the Office of Information Technology, US Department of Housing and Urban Development, Washington, DC 20410-3600. When providing comments, please refer to OMB Approval No. 2502-0118. HUD may not conduct and sponsor, and a person is not required to respond to, a collection of information unless the collection displays a valid control number.

The collection is authorized by 12 U.S.C 1702-1715z; 42 U.S.C. 3535(d). HUD form 2530 is created to collect information as mandated by 24 CFR Part 200. The HUD-2530 form is used to protect HUD's Multifamily Housing and Healthcare programs by comprehensively assessing industry participants' risk. It is the Department's policy that participants in its housing programs honor their legal, financial, and contractual obligations. Accordingly, uniform standards are established for approvals, disapprovals, or withholding actions on principals in projects, based upon their past performances as well as other relevant information. Respondents such as owners, management agents, master tenants, general contractors, and nursing home operators are subject to review. The information on this form needs to be collected by the Department to evaluate participants' previous performance and compliance with contracts, regulations, and directives.

CERTIFICATE AND RELEASE

FROM: _____

TO: Youngstown Metropolitan Housing Authority

REFERENCE CONTRACT ENTERED INTO: Victory Estates Bathroom Rehabilitation

AGREEMENT BETWEEN THE ABOVE STATE PARTIES FOR THE REHABILITATION OF

PROPERTY AT: 690 Magnolia Ave. Youngstown, OH 44505

KNOW ALL MEN BY THESE PRESENTS:

1. The undersigned hereby certifies that there is due from and payable by the Youngstown Metropolitan Housing Authority to the Contractor under the Contract and duly approved Change Orders and modifications the balance of:

\$ _____

2. The undersigned further certifies that all work required under this contract including work required under Change Order No. _____ has been performed in accordance with the terms thereof, and that there are no claims of suppliers, laborers or mechanics, or subcontractors for unpaid wages arising out of the performance of this contract.

3. That in consideration of the payment of the amount stated in paragraph 1 hereof, the undersigned does hereby release the Youngstown MHA from any and all claims arising under or as authorized by this contract any duly approved Change Orders.

IN WITNESS WHEREOF, the undersigned has signed this instrument

This _____ Day of _____, 20_____.

CONTRACTOR

State of Ohio
County of _____

Sworn to and subscribed this _____ day of _____, 20_____.

Notary Public

**Youngstown Metropolitan Housing Authority
131 W. Boardman St.
Youngstown, OH 44503
(330) 744-2161**

**DRUG-FREE AND ALCOHOL-FREE WORKPLACE POLICY
FOR CONTRACTORS**

The Federal Government recently enacted a law, the Drug-Free Workplace Act of 1988, which covers all agencies dealing directly with Federal Government. Youngstown Metropolitan Housing Authority is a grantee under this law. Youngstown MHA has established some definite steps in order to make a "Good Faith Effort" in maintaining a drug-free and alcohol-free workplace not only in the housing authority, but also with agencies dealing with the housing authority. Youngstown MHA is requesting that all contractors and subcontractors adopt a policy statement prohibiting unlawful controlled substances, their use, possession, manufacture, distribution, or sale, and require the notification of any employee convicted for illegal drug offense in the workplace.

Illegal drugs and alcohol in the workplace are a danger to everyone. Youngstown MHA will not tolerate the illegal use and now by law, we cannot.

ALL CONTRACTORS, SUBCONTRACTORS, AND EMPLOYEES OF SUCH ARE ABSOLUTELY PROHIBITED FROM UNLAWFULLY MANUFACTURING IN THE WORKPLACE. THIS INCLUDES ALCOHOL IN ANY FORM.

Any contractor and their employees or subcontractors violating the above policy while working on a Youngstown MHA site, will be subjected to termination and all cost incurred.

Contractors and subcontractors are so warned that they are responsible for the information contained herein and passing on this information to all applicable parties.

=====

CERTIFICATION

I, _____ Certify that I am the _____ of _____ We have been accepted as a contractor/subcontractor and that we will comply with the Drug-free Workplace Act of 1988.

By: _____

Title: _____

Date: _____

SECTION 00 4504

EQUAL EMPLOYMENT OPPORTUNITY/AFFIRMATIVE ACTION POLICY STATEMENT

If is the policy of the Youngstown Metropolitan Housing Authority to afford equal opportunity for employment to all individuals regardless of race, color, religion, sex or national origin. The corporation is basically committed to this policy by our status as a Federal Government contractor. We are far more strongly bound to the policy by the fact that adherence to the principles involved is the only acceptable American way of life. Therefore, this corporation will take affirmative action to ensure that we will: (1) recruit, hire and promote all job classifications without regard to race, color, religion, sex or national origin, except where sex is a bonafide occupational qualification; (2) base decisions on employment so as to further the principle of equal employment opportunity; (3) ensure that promotion decisions are in accord with principles of equal employment opportunity by imposing only valid requirements for promotional opportunities; (4) ensure that all personnel actions such as compensation, benefits, transfers, layoffs, return from layoff, company sponsored training, education, tuition assistance, social and recreation programs will be administered without regard to race, color, religion, sex or national origin, except where sex is a bonafide occupational qualification. Additionally, Youngstown Metropolitan Housing Authority intends full compliance with Handicapped and Veteran Affirmative Action requirements.

The successful achievement of a nondiscriminatory employment program requires a maximum of cooperation between management and employees. In fulfilling its part in this cooperative effort, management is obliged to lead the way by establishing and implementing affirmative procedures and practices which will ensure our objective, namely equitable employment opportunity for all. Minority and Female employees are encouraged to participate in all company opportunity area.

I have designated the (General Superintendent) to be assisted by the (Project Superintendent), to direct the establishment of and to monitor the implementation of personnel procedures to guide our affirmative action program. This official is charged with designing and implementing audit and reporting systems that will keep management informed on a monthly basis of the status of the equal employment opportunity area.

Supervision has been made to understand that their work performance is being evaluated on the basis of their equal employment opportunity efforts and results, as well as other criteria. It shall be a responsibility of supervisors to take actions to prevent harassment of employees placed through affirmative action efforts.

Signature: _____

Title: _____

Date: _____

NOTE: Prime and Subcontractors with contracts of \$500,000 or more, must designate in their policy statement the liaison officer who will administer the Contractor's "Minority Business Enterprise Program."

END OF SECTION 00 4504

**SECTION 00 4513
BIDDER QUALIFICATIONS**

PART 1 - GENERAL

1.1 SUMMARY

A. Bidders shall complete the form in this section and submit it with the Bid Form.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION 00 4513

This information is not a public record under Ohio Revised Code Section 149.43; and shall remain confidential, except under proper order of a court.

4. **Facilities & Equipment.** Indicate Bidder's relevant facilities and major equipment (leased or owned).

5. **Ongoing & Relevant Projects.** List all ongoing projects and projects completed in the last 4 years which are similar in cost and type to the Project being bid. Include scope of Work, Contract value and Project name/contact Person/address/phone number for each Owner and Architect/Engineer for each project.

6. **Regulatory / Contractual.** Indicate all occurrences of the following in the last 4 years (indicate if none). For verification, attach documentation, and/or provide sufficient and appropriate detail information such as: Project name, Owner, contact person and phone number, Contract amount, etc.
 - a) Prevailing Wage violations or judgments

 - b) Affirmative Action violations

 - c) Contract abandonment, Contract termination, as either a prime- or sub-contractor, or Surety takeover

 - d) Debarment by State, federal or local jurisdictions

 - e) EPA/OSHA violations

 - f) Liquidated damages and Statutory Delay Forfeiture assessed

7. Management. Identify individuals assigned to this Project.

Principal _____ Years with firm _____ Total
Exp. _____

Project Manager _____ Years with firm _____ Total
Exp. _____

Field Superintendent _____ Years with firm _____ Total
Exp. _____

8. Certification. I hereby certify that the information in this entire Bidder's Qualifications form, including all attachments and referenced information, is factual and complete.

Company Name

Authorized Official (please print or type)

END OF BIDDER QUALIFICATIONS FORM

**SECTION 00 4514a
HUD SECTION 3 CERTIFICATION**

PART 1 - GENERAL

1.1 SUMMARY

- A. The General Conditions for the Project shall be HUD-5370 General Conditions for Construction Contracts - Public Housing Programs.
- B. Related Sections:
 - 1. 00 5000 – Agreement Form.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION 00 4514

SECTION 00 4514b
SECTION 3 OF THE HUD ACT OF 1968

Under the provisions of Section 3 of the Housing and Urban Development Act of 1968, as amended, the Youngstown MHA shall require that, to the greatest extent feasible, opportunities for training and employment be given to lower income persons residing within the unit of local government.

SECTION 3 CLAUSE

THE FOLLOWING SECTION 3 CLAUSE SHALL BE INCLUDED IN ALL CONTRACTS FOR WORK IN CONNECTION WITH ALL HUD FUNDED PROJECTS:

- A. The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low and very low-income persons, particularly persons who are recipients of HUD assistance for housing.
- B. The parties to this contract agree to comply with HUD's regulations in 24 CFR part 75, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 75 regulations.
- C. The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.
- D. The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 75, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 75. The contractor will not subcontract with any subcontractor where the contractor has notice of knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 75.
- E. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 75 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR part 75.
- F. Noncompliance with HUD's regulations in 24 CFR part 75 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

SECTION 3

**EMPLOYMENT CERTIFICATION
REQUIRED FOR ALL HUD FUNDED CONTRACTS**

The Company hereby certifies that it will make a good faith effort to employ lower income project are residents, utilizing the Youngstown Metropolitan Housing Authority and other such community-based organizations and service agencies. Contractors will be required to provide documentation upon request for Youngstown MHA demonstrating compliance to this section.

Company Name

Authorized Signature

Title: _____

Date: _____

Subscribed and sworn to before me

This _____ Day of _____, 20__

Notary Public

My Commission Expires _____, 20__

YOUNGSTOWN METROPLITAN)
HOUSING AUTHORITY)

AFFIDAVIT OF MINORITY OR WOMAN
BUSINESS ENTERPRISE

I hereby declare and affirm that the following firm is a :
_____ Minority Business Enterprise

_____ Woman Business Enterprise

and that the following information about the firm is correct to the best of my knowledge and belief.

1. Name of Firm _____

2. Full Address _____

3. Telephone Number _____

4. Form of Business Organization: ___ Sole Proprietorship ___ Partnership
___ Corporation ___ Joint Venture ___ Other (Specify) _____

5. a.) Date Business Formed _____ b.) Federal ID No. _____

6. Nature of Business _____

7. List principals of firms including, as appropriate, all officers, directors, managers, and shareholders:

NAME	(CHECK)		% OF OWNERSHIP	DATE OF OWNERSHIP
	MINORITY	FEMALE		
A) _____	_____	_____	_____	_____
B) _____	_____	_____	_____	_____
C) _____	_____	_____	_____	_____
D) _____	_____	_____	_____	_____

8. This firm is an independent business. The minority of female owners possess the power to direct or cause the direction of management and policies of the business, and make day to day major decisions of matters of management, policy, and operations.

Affiant

Title

Sworn to before me and subscribed in my presence this _____ Day of _____,
20__.

Notary Public

**SECTION 00 4519
NON-COLLUSION AFFIDAVIT**

PART 1 – GENERAL

1.1 SUMMARY

- A. Section includes a non-collusion affidavit form.
- B. The Bidder shall execute the affidavit that appears on the attached page and submit it as an attachment to the Bid.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION 00 4519

NON-COLLUSION AFFIDAVIT

STATE OF _____,

COUNTY OF _____

I, _____, _____,
(Name) (Title)

being duly sworn, do depose and say:

that _____
(Insert name of all persons, firms, or corporations interested in bid)

its agent, officers, or employees have not directly or indirectly entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal.

(Signature)

(Title)

STATE OF OHIO
COUNTY OF _____

BEFORE ME, A Notary Public in and for the County of _____ and State of Ohio, personally appeared the above named

(Contractor / Supplier / Company Representative),

who did acknowledge that he / she did execute and sign the foregoing instrument and the same is his / her free act and deed individually, and as such representative of

(Company Name)

IN TESTIMONY WHEREOF, I have hereunto affixed my signature and seal at _____,

_____, this _____ day of _____, 20____

My Commission expires _____

**SECTION 00 5000
AGREEMENT FORM**

PART 1 - GENERAL

1.1 SUMMARY

- A. The Owner-Contractor Agreement is AIA A101 *Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum* or other form of Owner-Contractor Agreement agreed upon by Owner.
- B. Related Sections:
 - 1. 00 7200 – General Conditions.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION 00 5000

DRAFT AIA® Document A101® - 2017

Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum

AGREEMENT made as of the « » day of « » in the year « »
(In words, indicate day, month and year.)

BETWEEN the Owner:
(Name, legal status, address and other information)

« »
« »
« »
« »

and the Contractor:
(Name, legal status, address and other information)

« »
« »
« »
« »

for the following Project:
(Name, location and detailed description)

« »
« »
« »

The Architect:
(Name, legal status, address and other information)

« »
« »
« »
« »

The Owner and Contractor agree as follows.

ADDITIONS AND DELETIONS:
The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

The parties should complete A101®-2017, Exhibit A, Insurance and Bonds, contemporaneously with this Agreement. AIA Document A201®-2017, General Conditions of the Contract for Construction, is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

ELECTRONIC COPYING of any portion of this AIA® Document to another electronic file is prohibited and constitutes a violation of copyright laws as set forth in the footer of this document.

TABLE OF ARTICLES

- 1 THE CONTRACT DOCUMENTS**
- 2 THE WORK OF THIS CONTRACT**
- 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION**
- 4 CONTRACT SUM**
- 5 PAYMENTS**
- 6 DISPUTE RESOLUTION**
- 7 TERMINATION OR SUSPENSION**
- 8 MISCELLANEOUS PROVISIONS**
- 9 ENUMERATION OF CONTRACT DOCUMENTS**

EXHIBIT A INSURANCE AND BONDS

ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary, and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement, and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. An enumeration of the Contract Documents, other than a Modification, appears in Article 9.

ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others.

ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be:

(Check one of the following boxes.)

- [« »] The date of this Agreement.
 - [« »] A date set forth in a notice to proceed issued by the Owner.
 - [« »] Established as follows:
(Insert a date or a means to determine the date of commencement of the Work.)
- [« »]

If a date of commencement of the Work is not selected, then the date of commencement shall be the date of this Agreement.

§ 3.2 The Contract Time shall be measured from the date of commencement of the Work.

§ 3.3 Substantial Completion

§ 3.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall achieve Substantial Completion of the entire Work:

(Check one of the following boxes and complete the necessary information.)

[« »] Not later than « » (« ») calendar days from the date of commencement of the Work.

[« »] By the following date: « »

§ 3.3.2 Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work are to be completed prior to Substantial Completion of the entire Work, the Contractor shall achieve Substantial Completion of such portions by the following dates:

Portion of Work	Substantial Completion Date

§ 3.3.3 If the Contractor fails to achieve Substantial Completion as provided in this Section 3.3, liquidated damages, if any, shall be assessed as set forth in Section 4.5.

ARTICLE 4 CONTRACT SUM

§ 4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be « » (\$ « »), subject to additions and deductions as provided in the Contract Documents.

§ 4.2 Alternates

§ 4.2.1 Alternates, if any, included in the Contract Sum:

Item	Price

§ 4.2.2 Subject to the conditions noted below, the following alternates may be accepted by the Owner following execution of this Agreement. Upon acceptance, the Owner shall issue a Modification to this Agreement. *(Insert below each alternate and the conditions that must be met for the Owner to accept the alternate.)*

Item	Price	Conditions for Acceptance

§ 4.3 Allowances, if any, included in the Contract Sum: *(Identify each allowance.)*

Item	Price

§ 4.4 Unit prices, if any:

(Identify the item and state the unit price and quantity limitations, if any, to which the unit price will be applicable.)

Item	Units and Limitations	Price per Unit (\$0.00)

§ 4.5 Liquidated damages, if any:

(Insert terms and conditions for liquidated damages, if any.)

« »

§ 4.6 Other:

(Insert provisions for bonus or other incentives, if any, that might result in a change to the Contract Sum.)

« »

ARTICLE 5 PAYMENTS

§ 5.1 Progress Payments

§ 5.1.1 Based upon Applications for Payment submitted to the Architect by the Contractor and Certificates for Payment issued by the Architect, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.

§ 5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

« »

§ 5.1.3 Provided that an Application for Payment is received by the Architect not later than the « » day of a month, the Owner shall make payment of the amount certified to the Contractor not later than the « » day of the « » month. If an Application for Payment is received by the Architect after the application date fixed above, payment of the amount certified shall be made by the Owner not later than « » (« ») days after the Architect receives the Application for Payment.

(Federal, state or local laws may require payment within a certain period of time.)

§ 5.1.4 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be prepared in such form, and supported by such data to substantiate its accuracy, as the Architect may require. This schedule of values shall be used as a basis for reviewing the Contractor's Applications for Payment.

§ 5.1.5 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

§ 5.1.6 In accordance with AIA Document A201™–2017, General Conditions of the Contract for Construction, and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

§ 5.1.6.1 The amount of each progress payment shall first include:

- .1 That portion of the Contract Sum properly allocable to completed Work;
- .2 That portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction, or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing; and
- .3 That portion of Construction Change Directives that the Architect determines, in the Architect's professional judgment, to be reasonably justified.

§ 5.1.6.2 The amount of each progress payment shall then be reduced by:

- .1 The aggregate of any amounts previously paid by the Owner;
- .2 The amount, if any, for Work that remains uncorrected and for which the Architect has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A201–2017;
- .3 Any amount for which the Contractor does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Contractor intends to pay;
- .4 For Work performed or defects discovered since the last payment application, any amount for which the Architect may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A201–2017; and
- .5 Retainage withheld pursuant to Section 5.1.7.

§ 5.1.7 Retainage

§ 5.1.7.1 For each progress payment made prior to Substantial Completion of the Work, the Owner may withhold the following amount, as retainage, from the payment otherwise due:

(Insert a percentage or amount to be withheld as retainage from each Application for Payment. The amount of retainage may be limited by governing law.)

« »

§ 5.1.7.1.1 The following items are not subject to retainage:
(Insert any items not subject to the withholding of retainage, such as general conditions, insurance, etc.)

<< >>

§ 5.1.7.2 Reduction or limitation of retainage, if any, shall be as follows:
(If the retainage established in Section 5.1.7.1 is to be modified prior to Substantial Completion of the entire Work, including modifications for Substantial Completion of portions of the Work as provided in Section 3.3.2, insert provisions for such modifications.)

<< >>

§ 5.1.7.3 Except as set forth in this Section 5.1.7.3, upon Substantial Completion of the Work, the Contractor may submit an Application for Payment that includes the retainage withheld from prior Applications for Payment pursuant to this Section 5.1.7. The Application for Payment submitted at Substantial Completion shall not include retainage as follows:
(Insert any other conditions for release of retainage upon Substantial Completion.)

<< >>

§ 5.1.8 If final completion of the Work is materially delayed through no fault of the Contractor, the Owner shall pay the Contractor any additional amounts in accordance with Article 9 of AIA Document A201–2017.

§ 5.1.9 Except with the Owner’s prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

§ 5.2 Final Payment

§ 5.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

- .1 the Contractor has fully performed the Contract except for the Contractor’s responsibility to correct Work as provided in Article 12 of AIA Document A201–2017, and to satisfy other requirements, if any, which extend beyond final payment; and
- .2 a final Certificate for Payment has been issued by the Architect.

§ 5.2.2 The Owner’s final payment to the Contractor shall be made no later than 30 days after the issuance of the Architect’s final Certificate for Payment, or as follows:

<< >>

§ 5.3 Interest

Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

(Insert rate of interest agreed upon, if any.)

<< >> % << >>

ARTICLE 6 DISPUTE RESOLUTION

§ 6.1 Initial Decision Maker

The Architect will serve as the Initial Decision Maker pursuant to Article 15 of AIA Document A201–2017, unless the parties appoint below another individual, not a party to this Agreement, to serve as the Initial Decision Maker.

(If the parties mutually agree, insert the name, address and other contact information of the Initial Decision Maker, if other than the Architect.)

<< >>

<< >>

<< >>
<< >>

§ 6.2 Binding Dispute Resolution

For any Claim subject to, but not resolved by, mediation pursuant to Article 15 of AIA Document A201–2017, the method of binding dispute resolution shall be as follows:

(Check the appropriate box.)

[] Arbitration pursuant to Section 15.4 of AIA Document A201–2017

[] Litigation in a court of competent jurisdiction

[] Other *(Specify)*

<< >>

If the Owner and Contractor do not select a method of binding dispute resolution, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, Claims will be resolved by litigation in a court of competent jurisdiction.

ARTICLE 7 TERMINATION OR SUSPENSION

§ 7.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A201–2017.

§ 7.1.1 If the Contract is terminated for the Owner’s convenience in accordance with Article 14 of AIA Document A201–2017, then the Owner shall pay the Contractor a termination fee as follows:

(Insert the amount of, or method for determining, the fee, if any, payable to the Contractor following a termination for the Owner’s convenience.)

<< >>

§ 7.2 The Work may be suspended by the Owner as provided in Article 14 of AIA Document A201–2017.

ARTICLE 8 MISCELLANEOUS PROVISIONS

§ 8.1 Where reference is made in this Agreement to a provision of AIA Document A201–2017 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

§ 8.2 The Owner’s representative:

(Name, address, email address, and other information)

<< >>
<< >>
<< >>
<< >>
<< >>
<< >>
<< >>

§ 8.3 The Contractor’s representative:

(Name, address, email address, and other information)

<< >>
<< >>
<< >>
<< >>
<< >>
<< >>
<< >>

§ 8.4 Neither the Owner’s nor the Contractor’s representative shall be changed without ten days’ prior notice to the other party.

§ 8.5 Insurance and Bonds

§ 8.5.1 The Owner and the Contractor shall purchase and maintain insurance as set forth in AIA Document A101™–2017, Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum, Exhibit A, Insurance and Bonds, and elsewhere in the Contract Documents.

§ 8.5.2 The Contractor shall provide bonds as set forth in AIA Document A101™–2017 Exhibit A, and elsewhere in the Contract Documents.

§ 8.6 Notice in electronic format, pursuant to Article 1 of AIA Document A201–2017, may be given in accordance with a building information modeling exhibit, if completed, or as otherwise set forth below:

(If other than in accordance with a building information modeling exhibit, insert requirements for delivering notice in electronic format such as name, title, and email address of the recipient and whether and how the system will be required to generate a read receipt for the transmission.)

« »

§ 8.7 Other provisions:

« »

ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS

§ 9.1 This Agreement is comprised of the following documents:

- .1 AIA Document A101™–2017, Standard Form of Agreement Between Owner and Contractor
- .2 AIA Document A101™–2017, Exhibit A, Insurance and Bonds
- .3 AIA Document A201™–2017, General Conditions of the Contract for Construction
- .4 Building information modeling exhibit, dated as indicated below:
(Insert the date of the building information modeling exhibit incorporated into this Agreement.)

« »

- .5 Drawings

Number	Title	Date

- .6 Specifications

Section	Title	Date	Pages

- .7 Addenda, if any:

Number	Date	Pages

Portions of Addenda relating to bidding or proposal requirements are not part of the Contract Documents unless the bidding or proposal requirements are also enumerated in this Article 9.

- .8 Other Exhibits:

(Check all boxes that apply and include appropriate information identifying the exhibit where required.)

[« »] AIA Document E204™–2017, Sustainable Projects Exhibit, dated as indicated below:

(Insert the date of the E204-2017 incorporated into this Agreement.)

« »

[« »] The Sustainability Plan:

Title	Date	Pages

[« »] Supplementary and other Conditions of the Contract:

Document	Title	Date	Pages

- .9 Other documents, if any, listed below:
(List here any additional documents that are intended to form part of the Contract Documents. AIA Document A201™-2017 provides that the advertisement or invitation to bid, Instructions to Bidders, sample forms, the Contractor’s bid or proposal, portions of Addenda relating to bidding or proposal requirements, and other information furnished by the Owner in anticipation of receiving bids or proposals, are not part of the Contract Documents unless enumerated in this Agreement. Any such documents should be listed here only if intended to be part of the Contract Documents.)

« »

This Agreement entered into as of the day and year first written above.

OWNER (Signature)

« »« »

(Printed name and title)

CONTRACTOR (Signature)

« »« »

(Printed name and title)

**SECTION 00 6613
REQUEST FOR INTERPRETATION FORM**

PART 1 – GENERAL

1.1 SUMMARY

- A. Section includes a sample form for submitting requests for interpretation for the Project or the contractor may use their own RFI form, including numbering system and date of request.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION 00 6613

REQUEST FOR INTERPRETATION

RFI #: _____

DATE: _____

PROJECT: _____

PROJECT NO: _____

FROM: _____

NEED BY: _____

COMPANY: _____

REQUESTED INFORMATION:
SUGGESTED OR POSSIBLE SOLUTION:
ARCHITECT /ENGINEER RESPONSE:

**SECTION 00 7200
GENERAL CONDITIONS**

PART 1 - GENERAL

1.1 SUMMARY

- A. The General Conditions for the Project shall be HUD-5370 General Conditions for Construction Contracts - Public Housing Programs.
- B. Related Sections:
 - 1. 00 5000 – Agreement Form.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION 00 7200

General Conditions for Construction Contracts - Public Housing Programs

U.S. Department of Housing and Urban
Development
Office of Public and Indian Housing
OMB Approval No. 2577-0157 (exp. 1/31/2027)

**Applicability. This form is applicable to any
construction/development contract greater than \$250,000.**

Public reporting burden for this collection of information is estimated to average 1.0 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Comments regarding the accuracy of this burden estimate and any suggestions for reducing this burden can be sent to the Reports Management Officer, Office of Policy Development and Research, REE, Department of Housing and Urban Development, 451 7th St SW, Room 4176, Washington, DC 20410-5000. When providing comments, please refer to OMB Approval No. 2577-0157. This form includes those clauses required by OMB's common rule on grantee procurement, implemented at HUD in 2 CFR 200, and those requirements set forth in Section 3 of the Housing and Urban Development Act of 1968 and its amendment by the Housing and Community Development Act of 1992, implemented by HUD at 24 CFR Part 75. The form is required for construction contracts awarded by Public Housing Agencies (PHAs). The form is used by Housing Authorities in solicitations to provide necessary contract clauses. If the form were not used, PHAs would be unable to enforce their contracts. Responses to the collection of information are required to obtain a benefit or to retain a benefit. The information requested does not lend itself to confidentiality. HUD may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB number.

Clause		Page	Clause		Page
1.	Definitions	2	Administrative Requirements		
2.	Contractor's Responsibility for Work	2	25.	Contract Period	9
3.	Architect's Duties, Responsibilities and Authority	2	26.	Order of Precedence	9
4.	Other Contracts	3	27.	Payments	9
Construction Requirements			28.	Contract Modifications	10
5.	Preconstruction Conference and Notice to Proceed	3	29.	Changes	10
6.	Construction Progress Schedule	3	30.	Suspension of Work	11
7.	Site Investigation and Conditions Affecting the Work	3	31.	Disputes	11
8.	Differing Site Conditions	4	32.	Default	11
9.	Specifications and Drawings for Construction	4	33.	Liquidated	12
10.	As-Built Drawings	5	34.	Termination of Convenience	12
11.	Material and Workmanship	5	35.	Assignment of Contract	12
12.	Permits and Codes	5	36.	Insurance	12
13.	Health, Safety, and Accident Prevention	6	37.	Subcontracts	13
14.	Temporary Buildings and Transportation Materials	6	38.	Subcontracting with Small and Minority Firms, Women's Business Enterprise, and Labor Surplus Area Firms	13
15.	Availability and Use of Utility Services	6	39.	Equal Employment Opportunity	13
16.	Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements	6	40.	Employment, Training, and Contracting Opportunities for Low-Income Persons, Section 3 of the Housing and Urban Development Act of 1968	14
17.	Temporary Buildings and Transportation Materials	7	41.	Interest of Members of Congress	15
18.	Clean Air and Water	7	42.	Interest of Members, Officers, or Employees and Former Members, Officers, or Employees	15
19.	Energy Efficiency	7	43.	Limitations on Payments Made to Influence	15
20.	Inspection and Acceptance of Construction	7	44.	Royalties and Patents	15
21.	Use and Possession Prior to	8	45.	Examination and Retention of Contractor's Records	15
22.	Warranty of Title	8	46.	Labor Standards-Davis-Bacon and Related Acts	15
23.	Warranty of	8	47.	Non-Federal Prevailing Wage Rates	19
24.	Prohibition Against	9	48.	Procurement of Recovered	19
	Liens			Materials	

1. Definitions

- (a) "Architect" means the person or other entity engaged by the PHA to perform architectural, engineering, design, and other services related to the work as provided for in the contract. When a PHA uses an engineer to act in this capacity, the terms "architect" and "engineer" shall be synonymous. The Architect shall serve as a technical representative of the Contracting Officer. The Architect's authority is as set forth elsewhere in this contract.
- (b) "Contract" means the contract entered into between the PHA and the Contractor. It includes the forms of Bid, the Bid Bond, the Performance and Payment Bond or Bonds or other assurance of completion, the Certifications, Representations, and Other Statements of Bidders (form HUD-5370), these General Conditions of the Contract for Construction (form HUD-5370), the applicable wage rate determinations from the U.S. Department of Labor, any special conditions included elsewhere in the contract, the specifications, and drawings. It includes all formal changes to any of those documents by addendum, change order, or other modification.
- (c) "Contracting Officer" means the person delegated the authority by the PHA to enter into, administer, and/or terminate this contract and designated as such in writing to the Contractor. The term includes any successor Contracting Officer and any duly authorized representative of the Contracting Officer also designated in writing. The Contracting Officer shall be deemed the authorized agent of the PHA in all dealings with the Contractor.
- (d) "Contractor" means the person or other entity entering into the contract with the PHA to perform all of the work required under the contract.
- (e) "Drawings" means the drawings enumerated in the schedule of drawings contained in the Specifications and as described in the contract clause entitled Specifications and Drawings for Construction herein.
- (f) "HUD" means the United States of America acting through the Department of Housing and Urban Development including the Secretary, or any other person designated to act on its behalf. HUD has agreed, subject to the provisions of an Annual Contributions Terms and Conditions (ACC), to provide financial assistance to the PHA, which includes assistance in financing the work to be performed under this contract. As defined elsewhere in these General Conditions or the contract documents, the determination of HUD may be required to authorize changes in the work or for release of funds to the PHA for payment to the Contractor. Notwithstanding HUD's role, nothing in this contract shall be construed to create any contractual relationship between the Contractor and HUD.
- (g) "Project" means the entire project, whether construction or rehabilitation, the work for which is provided for in whole or in part under this contract.
- (h) "PHA" means the Public Housing Agency organized under applicable state laws which is a party to this contract.
- (j) "Specifications" means the written description of the technical requirements for construction and includes the criteria and tests for determining whether the requirements are met.
- (l) "Work" means materials, workmanship, and manufacture and fabrication of components.

2. Contractor's Responsibility for Work

- (a) The Contractor shall furnish all necessary labor, materials, tools, equipment, and transportation necessary for performance of the work. The Contractor shall also furnish all necessary water, heat, light, and power not made available to the Contractor by the PHA pursuant to the clause entitled Availability and Use of Utility Services herein.
- (b) The Contractor shall perform on the site, and with its own organization, work equivalent to at least [] (12 percent unless otherwise indicated) of the total amount of work to be performed under the order. This percentage may be reduced by a supplemental agreement to this order if, during performing the work, the Contractor requests a reduction and the Contracting Officer determines that the reduction would be to the advantage of the PHA.
- (c) At all times during performance of this contract and until the work is completed and accepted, the Contractor shall directly superintend the work or assign and have on the work site a competent superintendent who is satisfactory to the Contracting Officer and has authority to act for the Contractor.
- (d) The Contractor shall be responsible for all damages to persons or property that occur as a result of the Contractor's fault or negligence, and shall take proper safety and health precautions to protect the work, the workers, the public, and the property of others. The Contractor shall hold and save the PHA, its officers and agents, free and harmless from liability of any nature occasioned by the Contractor's performance. The Contractor shall also be responsible for all materials delivered and work performed until completion and acceptance of the entire work, except for any completed unit of work which may have been accepted under the contract.
- (e) The Contractor shall lay out the work from base lines and bench marks indicated on the drawings and be responsible for all lines, levels, and measurements of all work executed under the contract. The Contractor shall verify the figures before laying out the work and will be held responsible for any error resulting from its failure to do so.
- (f) The Contractor shall confine all operations (including storage of materials) on PHA premises to areas authorized or approved by the Contracting Officer.
- (g) The Contractor shall at all times keep the work area, including storage areas, free from accumulations of waste materials. After completing the work and before final inspection, the Contractor shall (1) remove from the premises all scaffolding, equipment, tools, and materials (including rejected materials) that are not the property of the PHA and all rubbish caused by its work; (2) leave the work area in a clean, neat, and orderly condition satisfactory to the Contracting Officer; (3) perform all specified tests; and, (4) deliver the installation in complete and operating condition.
- (h) The Contractor's responsibility will terminate when all work has been completed, the final inspection made, and the work accepted by the Contracting Officer. The Contractor will then be released from further obligation except as required by the warranties specified elsewhere in the contract.

3. Architect's Duties, Responsibilities, and Authority

- (a) The Architect for this contract, and any successor, shall be designated in writing by the Contracting Officer.

- (b) The Architect shall serve as the Contracting Officer's technical representative with respect to architectural, **Schedule** engineering, and design matters related to the work performed under the contract. The Architect may provide direction on contract performance. Such direction shall be within the scope of the contract and may not be of a nature which: (1) institutes additional work outside the scope of the contract; (2) constitutes a change as defined in the Changes clause herein; (3) causes an increase or decrease in the cost of the contract; (4) alters the Construction Progress Schedule; or (5) changes any of the other express terms or conditions of the contract.
- (c) The Architect's duties and responsibilities may include but shall not be limited to:
- (1) Making periodic visits to the work site, and on the basis of his/her on-site inspections, issuing written reports to the PHA which shall include all observed deficiencies. The Architect shall file a copy of the report with the Contractor's designated representative at the site;
 - (2) Making modifications in drawings and technical specifications and assisting the Contracting Officer in the preparation of change orders and other contract modifications for issuance by the Contracting Officer;
 - (3) Reviewing and making recommendations with respect to - (i) the Contractor's construction progress schedules; (ii) the Contractor's shop and detailed drawings; (iii) the machinery, mechanical and other equipment and materials or other articles proposed for use by the Contractor; and, (iv) the Contractor's price breakdown and progress payment estimates; and,
 - (4) Assisting in inspections, signing Certificates of Completion, and making recommendations with respect to acceptance of work completed under the contract.

4. Other Contracts

The PHA may undertake or award other contracts for additional work at or near the site of the work under this contract. The Contractor shall fully cooperate with the other contractors and with PHA employees and shall carefully adapt scheduling and performing the work under this contract to accommodate the additional work, heeding any direction that may be provided by the Contracting Officer. The Contractor shall not commit or permit any act that will interfere with the performance of work by any other contractor or by PHA employees

Construction Requirements

5. Pre-construction Conference and Notice to Proceed

of the work, and that it has investigated and satisfied itself

- (a) Within ten calendar days of contract execution, and prior to the commencement of work, the Contractor shall attend a preconstruction conference with representatives of the PHA, its Architect, and other interested parties convened by the PHA. The conference will serve to acquaint the participants with the general plan of the construction operation and all other requirements of the contract. The PHA will provide the Contractor with the date, time, and place of the conference.
- (b) The contractor shall begin work upon receipt of a written Notice to Proceed from the Contracting Officer or designee. The Contractor shall not begin work prior to receiving such notice.

6. Construction Progress

- (a) The Contractor shall, within five days after the work commences on the contract or another period of time determined by the Contracting Officer, prepare and submit to the Contracting Officer for approval three copies of a practicable schedule showing the order in which the Contractor proposes to perform the work, and the dates on which the Contractor contemplates starting and completing the several salient features of the work (including acquiring labor, materials, and equipment). The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the period. If the Contractor fails to submit a schedule within the time prescribed, the Contracting Officer may withhold approval of progress payments or take other remedies under the contract until the Contractor submits the required schedule.
- (b) The Contractor shall enter the actual progress on the chart as required by the Contracting Officer, and immediately deliver three copies of the annotated schedule to the Contracting Officer. If the Contracting Officer determines, upon the basis of inspection conducted pursuant to the clause entitled Inspection and Acceptance of Construction, herein that the Contractor is not meeting the approved schedule, the Contractor shall take steps necessary to improve its progress, including those that may be required by the Contracting Officer, without additional cost to the PHA. In this circumstance, the Contracting Officer may require the Contractor to increase the number of shifts, overtime operations, days of work, and/or the amount of construction plant, and to submit for approval any supplementary schedule or schedules in chart form as the Contracting Officer deems necessary to demonstrate how the approved rate of progress will be regained.
- (c) Failure of the Contractor to comply with the requirements of the Contracting Officer under this clause shall be grounds for a determination by the Contracting Officer that the Contractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the Contract. Upon making this determination, the Contracting Officer may terminate the Contractor's right to proceed with the work, or any separable part of it, in accordance with the Default clause of this contract.

7. Site Investigation and Conditions Affecting the Work

- (a) The Contractor acknowledges that it has taken steps reasonably necessary to ascertain the nature and location as to the general and local conditions which can affect the work or its cost, including but not limited to, (1) conditions bearing upon transportation, disposal, handling, and storage of materials; (2) the availability of labor, water, electric power, and roads; (3) uncertainties of weather, river stages, tides, or similar physical conditions at the site; (4) the conformation and conditions of the ground; and (5) the character of equipment and facilities needed preliminary to and during work performance. The Contractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is

reasonably ascertainable from an inspection of the site, including all exploratory work done by the PHA, as well as from the drawings and specifications made a part of this contract. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the work, or for proceeding to successfully perform the work without additional expense to the PHA.

(b) The PHA assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by the PHA. Nor does the PHA assume responsibility for any understanding reached or representation made concerning conditions which can affect the work by any of its officers or agents before the execution of this contract, unless that understanding or representation is expressly stated in this contract.

8. Differing Site Conditions

- (a) The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the Contracting Officer of (1) subsurface or latent physical conditions at the site which differ materially from those indicated in this contract, or (2) unknown physical conditions at the site(s), of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract.
- (b) The Contracting Officer shall investigate the site conditions promptly after receiving the notice. Work shall not proceed at the affected site, except at the Contractor's risk, until the Contracting Officer has provided written instructions to the Contractor. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the work under this contract, whether or not changed as a result of the conditions, the Contractor shall file a claim in writing to the PHA within ten days after receipt of such instructions and, in any event, before proceeding with the work. An equitable adjustment in the contract price, the delivery schedule, or both shall be made under this clause and the contract modified in writing accordingly.
- (c) No request by the Contractor for an equitable adjustment to the contract under this clause shall be allowed, unless the Contractor has given the written notice required; provided, that the time prescribed in (a) above for giving written notice may be extended by the Contracting Officer.
- (d) No request by the Contractor for an equitable adjustment to the contract for differing site conditions shall be allowed if made after final payment under this contract.

9. Specifications and Drawings for Construction

- (a) The Contractor shall keep on the work site a copy of the drawings and specifications and shall at all times give the Contracting Officer access thereto. Anything mentioned in the specifications and not shown on the drawings, or shown on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both. In case of difference between drawings and specifications, the specifications shall govern. In case of discrepancy in the figures, in the drawings, or in the specifications, the matter shall be

promptly submitted to the Contracting Officer, who shall promptly make a determination in writing. Any adjustment by the Contractor without such a determination shall be at its own risk and expense. The Contracting Officer shall furnish from time to time such detailed drawings and other information as considered necessary, unless otherwise provided.

- (b) Wherever in the specifications or upon the drawings the words "directed", "required", "ordered", "designated", "prescribed", or words of like import are used, it shall be understood that the "direction", "requirement", "order", "designation", or "prescription", of the Contracting Officer is intended and similarly the words "approved", "acceptable", "satisfactory", or words of like import shall mean "approved by", or "acceptable to", or "satisfactory to" the Contracting Officer, unless otherwise expressly stated.
- (c) Where "as shown" "as indicated", "as detailed", or words of similar import are used, it shall be understood that the reference is made to the drawings accompanying this contract unless stated otherwise. The word "provided" as used herein shall be understood to mean "provide complete in place" that is "furnished and installed".
- (d) "Shop drawings" means drawings, submitted to the PHA by the Contractor, subcontractor, or any lower tier subcontractor, showing in detail (1) the proposed fabrication and assembly of structural elements and (2) the installation (i.e., form, fit, and attachment details) of materials of equipment. It includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials furnished by the Contractor to explain in detail specific portions of the work required by the contract. The PHA may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this contract.
- (e) If this contract requires shop drawings, the Contractor shall coordinate all such drawings, and review them for accuracy, completeness, and compliance with other contract requirements and shall indicate its approval thereon as evidence of such coordination and review. Shop drawings submitted to the Contracting Officer without evidence of the Contractor's approval may be returned for resubmission. The Contracting Officer will indicate an approval or disapproval of the shop drawings and if not approved as submitted shall indicate the PHA's reasons therefore. Any work done before such approval shall be at the Contractor's risk. Approval by the Contracting Officer shall not relieve the Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this contract, except with respect to variations described and approved in accordance with (f) below.
- (f) If shop drawings show variations from the contract requirements, the Contractor shall describe such variations in writing, separate from the drawings, at the time of submission. If the Architect approves any such variation and the Contracting Officer concurs, the Contracting Officer shall issue an appropriate modification to the contract, except that, if the variation is minor or does not involve a change in price or in time of performance, a modification need not be issued.
- (g) It shall be the responsibility of the Contractor to make timely requests of the PHA for such large scale and full size drawings, color schemes, and other additional information, not already in his possession, which shall be

required in the planning and production of the work. Such requests may be submitted as the need arises, but each such request shall be filed in ample time to permit appropriate action to be taken by all parties involved so as to avoid delay.

- (h) The Contractor shall submit to the Contracting Officer for approval four copies (unless otherwise indicated) of all shop drawings as called for under the various headings of these specifications. Three sets (unless otherwise indicated) of all shop drawings, will be retained by the PHA and one set will be returned to the Contractor. As required by the Contracting Officer, the Contractor, upon completing the work under this contract, shall furnish a complete set of all shop drawings as finally approved. These drawings shall show all changes and revisions made up to the time the work is completed and accepted.
- (i) This clause shall be included in all subcontracts at any tier. It shall be the responsibility of the Contractor to ensure that all shop drawings prepared by subcontractors are submitted to the Contracting Officer.

10. As-Built Drawings

- (a) "As-built drawings," as used in this clause, means drawings submitted by the Contractor or subcontractor at any tier to show the construction of a particular structure or work as actually completed under the contract. "As-built drawings" shall be synonymous with "Record drawings."
- (b) As required by the Contracting Officer, the Contractor shall provide the Contracting Officer accurate information to be used in the preparation of permanent as-built drawings. For this purpose, the Contractor shall record on one set of contract drawings all changes from the installations originally indicated, and record final locations of underground lines by depth from finish grade and by accurate horizontal offset distances to permanent surface improvements such as buildings, curbs, or edges of walks.
- (c) This clause shall be included in all subcontracts at any tier. It shall be the responsibility of the Contractor to ensure that all as-built drawings prepared by subcontractors are submitted to the Contracting Officer.

11. Material and Workmanship

- (a) All equipment, material, and articles furnished under this contract shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in this contract. References in the contract to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition. The Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of, and as approved by the Contracting Officer, is equal to that named in the specifications, unless otherwise specifically provided in this contract.
- (b) Approval of equipment and materials.
- (1) The Contractor shall obtain the Contracting Officer's approval of the machinery and mechanical and other equipment to be incorporated into the work. When requesting approval, the Contractor shall furnish to the Contracting Officer the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the

machinery and mechanical and other equipment. When required by this contract or by the Contracting Officer, the Contractor shall also obtain the Contracting Officer's approval of the material or articles which the Contractor contemplates incorporating into the work. When requesting approval, the Contractor shall provide full information concerning the material or articles. Machinery, equipment, material, and articles that do not have the required approval shall be installed or used at the risk of subsequent rejection.

- (2) When required by the specifications or the Contracting Officer, the Contractor shall submit appropriately marked samples (and certificates related to them) for approval at the Contractor's expense, with all shipping charges prepaid. The Contractor shall label, or otherwise properly mark on the container, the material or product represented, its place of origin, the name of the producer, the Contractor's name, and the identification of the construction project for which the material or product is intended to be used.
- (3) Certificates shall be submitted in triplicate, describing each sample submitted for approval and certifying that the material, equipment or accessory complies with contract requirements. The certificates shall include the name and brand of the product, name of manufacturer, and the location where produced.
- (4) Approval of a sample shall not constitute a waiver of the PHA right to demand full compliance with contract requirements. Materials, equipment and accessories may be rejected for cause even though samples have been approved.
- (5) Wherever materials are required to comply with recognized standards or specifications, such specifications shall be accepted as establishing the technical qualities and testing methods, but shall not govern the number of tests required to be made nor modify other contract requirements. The Contracting Officer may require laboratory test reports on items submitted for approval or may approve materials on the basis of data submitted in certificates with samples. Check tests will be made on materials delivered for use only as frequently as the Contracting Officer determines necessary to insure compliance of materials with the specifications. The Contractor will assume all costs of retesting materials which fail to meet contract requirements and/or testing materials offered in substitution for those found deficient.
- (6) After approval, samples will be kept in the Project office until completion of work. They may be built into the work after a substantial quantity of the materials they represent has been built in and accepted.
- (c) Requirements concerning lead-based paint. The Contractor shall comply with the requirements concerning lead-based paint contained in the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4821-4846) as implemented by 24 CFR Part 35.

12. Permits and Codes

- (a) The Contractor shall give all notices and comply with all applicable laws, ordinances, codes, rules and regulations. Notwithstanding the requirement of the Contractor to comply with the drawings and specifications in the contract, all work installed shall comply with all applicable codes and regulations as amended by any

waivers. Before installing the work, the Contractor shall examine the drawings and the specifications for compliance with applicable codes and regulations bearing on the work and shall immediately report any discrepancy it may discover to the Contracting Officer.

Where the requirements of the drawings and specifications fail to comply with the applicable code or regulation, the Contracting Officer shall modify the contract by change order pursuant to the clause entitled Changes herein to conform to the code or regulation.

- (b) The Contractor shall secure and pay for all permits, fees, and licenses necessary for the proper execution and completion of the work. Where the PHA can arrange for the issuance of all or part of these permits, fees and licenses, without cost to the Contractor, the contract amount shall be reduced accordingly.

13. Health, Safety, and Accident Prevention

(a) In performing this contract, the Contractor shall:

- (1) Ensure that no laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his/her health and/or safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation;
- (2) Protect the lives, health, and safety of other persons;
- (3) Prevent damage to property, materials, supplies, and equipment; and,
- (4) Avoid work interruptions.

(b) For these purposes, the Contractor shall:

- (1) Comply with regulations and standards issued by the Secretary of Labor at 29 CFR Part 1926. Failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act (Public Law 91-54, 83 Stat. 96), 40 U.S.C. 3701 et seq.; and
- (2) Include the terms of this clause in every subcontract so that such terms will be binding on each subcontractor.

(c) The Contractor shall maintain an accurate record of exposure data on all accidents incident to work performed under this contract resulting in death, traumatic injury, occupational disease, or damage to property, materials, supplies, or equipment, and shall report this data in the manner prescribed by 29 CFR Part 1904.

(d) The Contracting Officer shall notify the Contractor of any noncompliance with these requirements and of the corrective action required. This notice, when delivered to the Contractor or the Contractor's representative at the site of the work, shall be deemed sufficient notice of the noncompliance and corrective action required. After receiving the notice, the Contractor shall immediately take corrective action. If the Contractor fails or refuses to take corrective action promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. The Contractor shall not base any claim or request for equitable adjustment for additional time or money on any stop order issued under these circumstances.

(e) The Contractor shall be responsible for its subcontractors' compliance with the provisions of this clause. The Contractor shall take such action with respect to any subcontract as the PHA, the Secretary of Housing and Urban Development, or the Secretary of Labor shall direct as a means of enforcing such provisions.

14. Temporary Heating

The Contractor shall provide and pay for temporary heating, covering, and enclosures necessary to properly protect all work and materials against damage by dampness and cold, to dry out the work, and to facilitate the completion of the work. Any permanent heating equipment used shall be turned over to the PHA in the condition and at the time required by the specifications.

15. Availability and Use of Utility Services

(a) The PHA shall make all reasonably required amounts of utilities available to the Contractor from existing outlets and supplies, as specified in the contract. Unless otherwise provided in the contract, the amount of each utility service consumed shall be charged to or paid for by the Contractor at prevailing rates charged to the PHA or, where the utility is produced by the PHA, at reasonable rates determined by the Contracting Officer. The Contractor shall carefully conserve any utilities furnished without charge.

(b) The Contractor, at its expense and in a manner satisfactory to the Contracting Officer, shall install and maintain all necessary temporary connections and distribution lines, and all meters required to measure the amount of each utility used for the purpose of determining charges. Before final acceptance of the work by the PHA, the Contractor shall remove all the temporary connections, distribution lines, meters, and associated paraphernalia.

16. Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements

(a) The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site, which are not to be removed under this contract, and which do not unreasonably interfere with the work required under this contract.

(b) The Contractor shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during performance of this contract, or by the careless operation of equipment, or by workmen, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer.

(c) The Contractor shall protect from damage all existing improvements and utilities (1) at or near the work site and (2) on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor. Prior to disturbing the ground at the construction site, the Contractor shall ensure that all underground utility lines are clearly marked.

(d) The Contractor shall shore up, brace, underpin, secure, and protect as necessary all foundations and other parts of existing structures adjacent to, adjoining, and in the vicinity of the site, which may be affected by the excavations or other operations connected with the construction of the project.

(e) Any equipment temporarily removed as a result of work under this contract shall be protected, cleaned, and replaced in the same condition as at the time of award of this contract.

- (f) New work which connects to existing work shall correspond in all respects with that to which it connects and/or be similar to existing work unless otherwise required by the specifications.
- (g) No structural members shall be altered or in any way weakened without the written authorization of the Contracting Officer, unless such work is clearly specified in the plans or specifications.
- (h) If the removal of the existing work exposes discolored or unfinished surfaces, or work out of alignment, such surfaces shall be refinished, or the material replaced as necessary to make the continuous work uniform and harmonious. This, however, shall not be construed to require the refinishing or reconstruction of dissimilar finishes previously exposed, or finished surfaces in good condition, but in different planes or on different levels **Construction** when brought together by the removal of intervening work, unless such refinishing or reconstruction is specified in the plans or specifications.
- (i) The Contractor shall give all required notices to any adjoining or adjacent property owner or other party before the commencement of any work.
- (j) The Contractor shall indemnify and save harmless the PHA from any damages on account of settlement or the loss of lateral support of adjoining property, any damages from changes in topography affecting drainage, and from all loss or expense and all damages for which the PHA may become liable in consequence of such injury or damage to adjoining and adjacent structures and their premises.
- (k) The Contractor shall repair any damage to vegetation, structures, equipment, utilities, or improvements, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If the Contractor fails or refuses to repair the damage promptly, the Contracting Officer may have the necessary work performed and charge the cost to the Contractor.

17. Temporary Buildings and Transportation of Materials

- (a) Temporary buildings (e.g., storage sheds, shops, offices, sanitary facilities) and utilities may be erected by the Contractor only with the approval of the Contracting Officer and shall be built with labor and materials furnished by the Contractor without expense to the PHA. The temporary buildings and utilities shall remain the property of the Contractor and shall be removed by the Contractor at its expense upon completion of the work. With the written consent of the Contracting Officer, the buildings and utilities may be abandoned and need not be removed.
- (b) The Contractor shall, as directed by the Contracting Officer, use only established roadways, or use temporary roadways constructed by the Contractor when and as authorized by the Contracting Officer. When materials are transported in prosecuting the work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any federal, state, or local law or regulation. When it is necessary to cross curbs or sidewalks, the Contractor shall protect them from damage. The Contractor shall repair or pay for the repair of any damaged curbs, sidewalks, or roads.

18. Clean Air and Water

The contractor shall comply with the Clean Air Act, as amended, 42 USC 7401 et seq., the Federal Water Pollution Control Water Act, as amended, 33 U.S.C. 1251 et seq., and standards issued pursuant thereto in the facilities in which this contract is to be performed.

19. Energy Efficiency

The Contractor shall comply with mandatory standards and policies relating to energy efficiency which are contained in the energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub.L. 94-163) for the State in which the work under the contract is performed.

20. Inspection and Acceptance of

- (a) Definitions. As used in this clause -
- (1) "Acceptance" means the act of an authorized representative of the PHA by which the PHA approves and assumes ownership of the work performed under this contract. Acceptance may be partial or complete.
- (2) "Inspection" means examining and testing the work performed under the contract (including, when appropriate, raw materials, equipment, components, and intermediate assemblies) to determine whether it conforms to contract requirements.
- (3) "Testing" means that element of inspection that determines the properties or elements, including functional operation of materials, equipment, or their components, by the application of established scientific principles and procedures.
- (b) The Contractor shall maintain an adequate inspection system and perform such inspections as will ensure that the work performed under the contract conforms to contract requirements. All work is subject to PHA inspection and test at all places and at all reasonable times before acceptance to ensure strict compliance with the terms of the contract.
- (c) PHA inspections and tests are for the sole benefit of the PHA and do not: (1) relieve the Contractor of responsibility for providing adequate quality control measures; (2) relieve the Contractor of responsibility for loss or damage of the material before acceptance; (3) constitute or imply acceptance; or, (4) affect the continuing rights of the PHA after acceptance of the completed work under paragraph (j) below.
- (d) The presence or absence of the PHA inspector does not relieve the Contractor from any contract requirement, nor is the inspector authorized to change any term or condition of the specifications without the Contracting Officer's written authorization. All instructions and approvals with respect to the work shall be given to the Contractor by the Contracting Officer.
- (e) The Contractor shall promptly furnish, without additional charge, all facilities, labor, and material reasonably needed for performing such safe and convenient inspections and tests as may be required by the Contracting Officer. The PHA may charge to the Contractor any additional cost of inspection or test when work is not ready at the time specified by the Contractor for inspection or test, or when prior rejection makes reinspection or retest necessary. The PHA shall perform all inspections and tests in a manner that will not unnecessarily delay the work. Special, full size, and performance tests shall be performed as described in the contract.

- (f) The PHA may conduct routine inspections of the construction site on a daily basis.
- (g) The Contractor shall, without charge, replace or correct work found by the PHA not to conform to contract requirements, unless the PHA decides that it is in its interest to accept the work with an appropriate adjustment in contract price. The Contractor shall promptly segregate and remove rejected material from the premises.
- (h) If the Contractor does not promptly replace or correct rejected work, the PHA may (1) by contract or otherwise, replace or correct the work and charge the cost to the Contractor, or (2) terminate for default the Contractor's right to proceed.
- (i) If any work requiring inspection is covered up without approval of the PHA, it must, if requested by the Contracting Officer, be uncovered at the expense of the Contractor. If at any time before final acceptance of the entire work, the **Construction PHA** considers it necessary or advisable, to examine work already completed by removing or tearing it out, the Contractor, shall on request, promptly furnish all necessary facilities, labor, and material. If such work is found to be defective or nonconforming in any material respect due to the fault of the Contractor or its subcontractors, the Contractor shall defray all the expenses of the examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the contract, the Contracting Officer shall make an equitable adjustment to cover the cost of the examination and reconstruction, including, if completion of the work was thereby delayed, an extension of time.
- (j) The Contractor shall notify the Contracting Officer, in writing, as to the date when in its opinion all or a designated portion of the work will be substantially completed and ready for inspection. If the Architect determines that the state of preparedness is as represented, the PHA will promptly arrange for the inspection. Unless otherwise specified in the contract, the PHA shall accept, as soon as practicable after completion and inspection, all work required by the contract or that portion of the work the Contracting Officer determines and designates can be accepted separately. Acceptance shall be final and conclusive except for latent defects, fraud, gross mistakes amounting to fraud, or the PHA's right under any warranty or guarantee.

21. Use and Possession Prior to Completion

- (a) The PHA shall have the right to take possession of or use any completed or partially completed part of the work. Before taking possession of or using any work, the Contracting Officer shall furnish the Contractor a list of items of work remaining to be performed or corrected on those portions of the work that the PHA intends to take possession of or use. However, failure of the Contracting Officer to list any item of work shall not relieve the Contractor of responsibility for complying with the terms of the contract. The PHA's possession or use shall not be deemed an acceptance of any work under the contract.
- (b) While the PHA has such possession or use, the Contractor shall be relieved of the responsibility for (1) the loss of or damage to the work resulting from the PHA's possession or use, notwithstanding the terms of the clause entitled Permits and Codes herein; (2) all maintenance costs on the areas occupied; and, (3) furnishing heat, light, power, and water used in the areas

occupied without proper remuneration therefore. If prior possession or use by the PHA delays the progress of the work or causes additional expense to the Contractor, an equitable adjustment shall be made in the contract price or the time of completion, and the contract shall be modified in writing accordingly.

22. Warranty of Title

The Contractor warrants good title to all materials, supplies, and equipment incorporated in the work and agrees to deliver the premises together with all improvements thereon free from any claims, liens or charges, and agrees further that neither it nor any other person, firm or corporation shall have any right to a lien upon the premises or anything appurtenant thereto.

23. Warranty of

- (a) In addition to any other warranties in this contract, the Contractor warrants, except as provided in paragraph (j) of this clause, that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, or workmanship performed by the Contractor or any subcontractor or supplier at any tier. This warranty shall continue for a period of _____ (one year unless otherwise indicated) from the date of final acceptance of the work. If the PHA takes possession of any part of the work before final acceptance, this warranty shall continue for a period of (one year unless otherwise indicated) from the date that the PHA takes possession.
- (b) The Contractor shall remedy, at the Contractor's expense, any failure to conform, or any defect. In addition, the Contractor shall remedy, at the Contractor's expense, any damage to PHA-owned or controlled real or personal property when the damage is the result of—
 - (1) The Contractor's failure to conform to contract requirements; or
 - (2) Any defects of equipment, material, workmanship or design furnished by the Contractor.
- (c) The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for (one year unless otherwise indicated) from the date of repair or replacement.
- (d) The Contracting Officer shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect or damage.
- (e) If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, the PHA shall have the right to replace, repair or otherwise remedy the failure, defect, or damage at the Contractor's expense.
- (f) With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall:
 - (1) Obtain all warranties that would be given in normal commercial practice;
 - (2) Require all warranties to be executed in writing, for the benefit of the PHA; and,
 - (3) Enforce all warranties for the benefit of the PHA.
- (g) In the event the Contractor's warranty under paragraph (a) of this clause has expired, the PHA may bring suit at its own expense to enforce a subcontractor's, manufacturer's or supplier's warranty.

- (h) Unless a defect is caused by the negligence of the Contractor or subcontractor or supplier at any tier, the Contractor shall not be liable for the repair of any defect of material or design furnished by the PHA nor for the repair of any damage that results from any defect in PHA furnished material or design.
- (i) Notwithstanding any provisions herein to the contrary, the establishment of the time periods in paragraphs (a) and (c) above relate only to the specific obligation of the Contractor to correct the work, and have no relationship to the time within which its obligation to comply with the contract may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to its obligation other than specifically to correct the work.
- (j) This warranty shall not limit the PHA's rights under the Inspection and Acceptance of Construction clause of this contract with respect to latent defects, gross mistakes or fraud.

24. Prohibition Against Liens

The Contractor is prohibited from placing a lien on the PHA's property. This prohibition shall apply to all subcontractors at any tier and all materials suppliers.

Administrative Requirements

25. Contract Period

this contract within _____ calendar days of the effective date of the contract, or within the time schedule established in the notice to proceed issued by the Contracting Officer.

26. Order of Provisions

accordance with the terms and conditions of the

In the event of a conflict between these General Conditions and the Specifications, the General Conditions shall prevail. In the event of a conflict between the contract and any applicable state or local law or regulation, the state or local law or regulation shall prevail; provided that such state or local law or regulation does not conflict with, or is less restrictive than applicable federal law, regulation, or Executive Order. In the event of such a conflict, applicable federal law, regulation, and Executive Order shall prevail.

27. Payments

retain ten (10) percent of the amount of progress

- (a) The PHA shall pay the Contractor the price as provided in this contract.
- (b) The PHA shall make progress payments approximately every 30 days as the work proceeds, on estimates of work accomplished which meets the standards of quality established under the contract, as approved by the Contracting Officer. The PHA may, subject to written determination and approval of the Contracting Officer, make more frequent payments to contractors which are qualified small businesses.
- (c) Before the first progress payment under this contract, the Contractor shall furnish, in such detail as requested by the Contracting Officer, a breakdown of the total contract price showing the amount included therein for each principal category of the work, which shall substantiate the payment amount requested in order to provide a

basis for determining progress payments. The breakdown shall be approved by the Contracting Officer and must be acceptable to HUD. If the contract covers more than one project, the Contractor shall furnish a separate breakdown for each. The values and quantities employed in making up this breakdown are for determining the amount of progress payments and shall not be construed as a basis for additions to or deductions from the contract price. The Contractor shall prorate its overhead and profit over the construction period of the contract.

- (d) The Contractor shall submit, on forms provided by the PHA, periodic estimates showing the value of the work performed during each period based upon the approved submitted not later than _____ days in advance of the date set for payment and are subject to correction and revision as required. The estimates must be approved by the Contracting Officer with the concurrence of the Architect prior to payment. If the contract covers more than one project, the Contractor shall furnish a separate progress payment estimate for each.
- (e) Along with each request for progress payments and the required estimates, the Contractor shall furnish the following certification, or payment shall not be made: I hereby certify, to the best of my knowledge and belief, that:

- (1) The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the contract;
- (2) Payments to subcontractors and suppliers have been made from previous payments received under the contract, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with subcontract agreements; and,
- (3) This request for progress payments does not include any amounts which the prime contractor intends to withhold or retain from a subcontractor or supplier in subcontract.

Name:

Title:

Date:

- (f) Except as otherwise provided in State law, the PHA shall payments until completion and acceptance of all work under the contract; except, that if upon completion of 50 percent of the work, the Contracting Officer, after consulting with the Architect, determines that the Contractor's performance and progress are satisfactory, the PHA may make the remaining payments in full for the work subsequently completed. If the Contracting Officer subsequently determines that the Contractor's performance and progress are unsatisfactory, the PHA shall reinstate the ten (10) percent (or other percentage as provided in State law) retainage until such time as the Contracting Officer determines that performance and progress are satisfactory.
- (g) The Contracting Officer may authorize material delivered on the site and preparatory work done to be taken into consideration when computing progress payments.

Material delivered to the Contractor at locations other than the site may also be taken into consideration if the Contractor furnishes satisfactory evidence that (1) it has acquired title to such material; (2) the material is properly stored in a bonded warehouse, storage yard, or similar suitable place as may be approved by the Contracting Officer; (3) the material is insured to cover its full value; and (4) the material will be used to perform this contract. Before any progress payment which includes delivered material is made, the Contractor shall furnish such documentation as the Contracting Officer may require to assure the protection of the PHA's interest in such materials. The Contractor shall remain responsible for such stored material notwithstanding the transfer of title to the PHA.

- (h) All material and work covered by progress payments made shall, at the time of payment become the sole property of the PHA, but this shall not be construed as (1) relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work; or, (2) waiving the right of the PHA to require the fulfillment of all of the terms of the contract. In the event the work of the Contractor has been damaged by other contractors or persons other than employees of the PHA in the course of their employment, the Contractor shall restore such damaged work without cost to the PHA and to seek redress for its damage only from those who directly caused it.
- (i) The PHA shall make the final payment due the Contractor under this contract after (1) completion and final acceptance of all work; and (2) presentation of release of all claims against the PHA arising by virtue of this contract, other than claims, in stated amounts, that the Contractor has specifically excepted from the operation of the release. Each such exception shall embrace no more than one claim, the basis and scope of which shall be clearly defined. The amounts for such excepted claims shall not be included in the request for final payment. A release may also be required of the assignee if the Contractor's claim to amounts payable under this contract has been assigned.
- (j) Prior to making any payment, the Contracting Officer may require the Contractor to furnish receipts or other evidence of payment from all persons performing work and supplying material to the Contractor, if the Contracting Officer determines such evidence is necessary to substantiate claimed costs.
- (k) The PHA shall not; (1) determine or adjust any claims for payment or disputes arising there under between the Contractor and its subcontractors or material suppliers; or, (2) withhold any moneys for the protection of the subcontractors or material suppliers. The failure or refusal of the PHA to withhold moneys from the Contractor shall in nowise impair the obligations of any surety or sureties under any bonds furnished under this contract.

28. Contract Modifications

- (a) Only the Contracting Officer has authority to modify any term or condition of this contract. Any contract modification shall be authorized in writing.
- (b) The Contracting Officer may modify the contract unilaterally (1) pursuant to a specific authorization stated in a contract clause (e.g., Changes); or (2) for administrative matters which do not change the rights or

responsibilities of the parties (e.g., change in the PHA address). All other contract modifications shall be in the form of supplemental agreements signed by the Contractor and the Contracting Officer.

- (c) When a proposed modification requires the approval of HUD prior to its issuance (e.g., a change order that exceeds the PHA's approved threshold), such modification shall not be effective until the required approval is received by the PHA.

29. Changes

- (a) The Contracting Officer may, at any time, without notice to the sureties, by written order designated or indicated to be a change order, make changes in the work within the general scope of the contract including changes:
 - (1) In the specifications (including drawings and designs);
 - (2) In the method or manner of performance of the work;
 - (3) PHA-furnished facilities, equipment, materials, services, or site; or,
 - (4) Directing the acceleration in the performance of the work.
- (b) Any other written order or oral order (which, as used in this paragraph (b), includes direction, instruction, interpretation, or determination) from the Contracting Officer that causes a change shall be treated as a change order under this clause; provided, that the Contractor gives the Contracting Officer written notice stating (1) the date, circumstances and source of the order and (2) that the Contractor regards the order as a change order.
- (c) Except as provided in this clause, no order, statement or conduct of the Contracting Officer shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment.
- (d) If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for the performance of any part of the work under this contract, whether or not changed by any such order, the Contracting Officer shall make an equitable adjustment and modify the contract in writing. However, except for an adjustment based on defective specifications, no proposal for any change under paragraph (b) above shall be allowed for any costs incurred more than 20 days (5 days for oral orders) before the Contractor gives written notice as required. In the case of defective specifications for which the PHA is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with the defective specifications.
- (e) The Contractor must assert its right to an adjustment under this clause within 30 days after (1) receipt of a written change order under paragraph (a) of this clause, or (2) the furnishing of a written notice under paragraph (b) of this clause, by submitting a written statement describing the general nature and the amount of the proposal. If the facts justify it, the Contracting Officer may extend the period for submission. The proposal may be included in the notice required under paragraph (b) above. No proposal by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this contract.
- (f) The Contractor's written proposal for equitable adjustment shall be submitted in the form of a lump sum proposal supported with an itemized breakdown of all increases and decreases in the contract in at least the following details:

- (1) Direct Costs. Materials (list individual items, the quantity and unit cost of each, and the aggregate cost); Transportation and delivery costs associated with materials; Labor breakdowns by hours or unit costs (identified with specific work to be performed); Construction equipment exclusively necessary for the change; Costs of preparation and/ or revision to shop drawings resulting from the change; Worker's Compensation and Public Liability Insurance; Employment taxes under FICA and FUTA; and, Bond Costs when size of change warrants revision.
- (2) Indirect Costs. Indirect costs may include overhead, general and administrative expenses, and fringe benefits not normally treated as direct costs.
- (3) Profit. The amount of profit shall be negotiated and may vary according to the nature, extent, and complexity of the work required by the change. The allowability of the direct and indirect costs shall be determined in accordance with the Contract Cost Principles and Procedures for Commercial Firms in Part 31 of the Federal Acquisition Regulation (48 CFR 1-31), as implemented by HUD Handbook 2210.18, in effect on the date of this contract. The Contractor shall not be allowed a profit on the profit received by any subcontractor. Equitable adjustments for deleted work shall include a credit for profit and may include a credit for indirect costs. On proposals covering both increases and decreases in the amount of the contract, the application of indirect costs and profit shall be on the net-change in direct costs for the Contractor or subcontractor performing the work.
- (g) The Contractor shall include in the proposal its request for time extension (if any), and shall include sufficient information and dates to demonstrate whether and to what extent the change will delay the completion of the contract in its entirety.
- (h) The Contracting Officer shall act on proposals within 30 days after their receipt, or notify the Contractor of the date when such action will be taken.
- (i) Failure to reach an agreement on any proposal shall be a dispute under the clause entitled Disputes herein. Nothing in this clause, however, shall excuse the Contractor from proceeding with the contract as changed.
- (j) Except in an emergency endangering life or property, no change shall be made by the Contractor without a prior order from the Contracting Officer.

30. Suspension of Work

- (a) The Contracting Officer may order the Contractor in writing to suspend, delay, or interrupt all or any part of the work of this contract for the period of time that the Contracting Officer determines appropriate for the convenience of the PHA.
- (b) If the performance of all or any part of the work is, for an unreasonable period of time, suspended, delayed, or interrupted (1) by an act of the Contracting Officer in the administration of this contract, or (2) by the Contracting Officer's failure to act within the time specified (or within a reasonable time if not specified) in this contract an adjustment shall be made for any increase in the cost of performance of the contract (excluding profit) necessarily caused by such unreasonable suspension, delay, or interruption and the contract modified in writing accordingly. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent that performance would have

- been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor or for which any equitable adjustment is provided for or excluded under any other provision of this contract.
- (c) A claim under this clause shall not be allowed (1) for any costs incurred more than 20 days before the Contractor shall have notified the Contracting Officer in writing of the act or failure to act involved (but this requirement shall not apply as to a claim resulting from a suspension order); and, (2) unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of the suspension, delay, or interruption, but not later than the date of final payment under the contract.

31. Disputes

- (a) "Claim," as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to the contract. A claim arising under the contract, unlike a claim relating to the contract, is a claim that can be resolved under a contract clause that provides for the relief sought by the claimant. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim. The submission may be converted to a claim by complying with the requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.
- (b) Except for disputes arising under the clauses entitled Labor Standards - Davis Bacon and Related Acts, herein, all disputes arising under or relating to this contract, including any claims for damages for the alleged breach thereof which are not disposed of by agreement, shall be resolved under this clause.
- (c) All claims by the Contractor shall be made in writing and submitted to the Contracting Officer for a written decision. A claim by the PHA against the Contractor shall be subject to a written decision by the Contracting Officer.
- (d) The Contracting Officer shall, within 60 (unless otherwise indicated) days after receipt of the request, decide the claim or notify the Contractor of the date by which the decision will be made.
- (e) The Contracting Officer's decision shall be final unless the Contractor (1) appeals in writing to a higher level in the PHA in accordance with the PHA's policy and procedures, (2) refers the appeal to an independent mediator or arbitrator, or (3) files suit in a court of competent jurisdiction. Such appeal must be made within (30 unless otherwise indicated) days after receipt of the Contracting Officer's decision.
- (f) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under or relating to the contract, and comply with any decision of the Contracting Officer.

32. Default

- (a) If the Contractor refuses or fails to prosecute the work, or any separable part thereof, with the diligence that will insure its completion within the time specified in this contract, or any extension thereof, or fails to complete said work within this time, the Contracting Officer may, by written notice to the Contractor, terminate the right to

proceed with the work (or separable part of the work) that has been delayed. In this event, the PHA may take over the work and complete it, by contract or otherwise, and may take possession of and use any materials, equipment, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the PHA resulting from the **Convenience** Contractor's refusal or failure to complete the work within the specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by the PHA in completing the work.

- (b) The Contractor's right to proceed shall not be terminated or the Contractor charged with damages under this clause if—
- (1) The delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include (i) acts of God, or of the public enemy, (ii) acts of the PHA or other governmental entity in either its sovereign or contractual capacity, (iii) acts of another contractor in the performance of a contract with the PHA, (iv) fires, (v) floods, (vi) epidemics, (vii) quarantine restrictions, (viii) strikes, (ix) freight embargoes, (x) unusually severe weather, or (xi) delays of subcontractors or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both the Contractor and the subcontractors or suppliers; and
 - (2) The Contractor, within days (10 days unless otherwise indicated) from the beginning of such delay (unless extended by the Contracting Officer) notifies the Contracting Officer in writing of the causes of delay. The Contracting Officer shall ascertain the facts and the extent of the delay. If, in the judgment of the Contracting Officer, the findings of fact warrant such action, time for completing the work shall be extended by written modification to the contract. The findings of the Contracting Officer shall be reduced to a written decision which shall be subject to the provisions of the Disputes clause of this contract.
- (c) If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been for convenience of the PHA.

33. Liquidated Damages

- (a) If the Contractor fails to complete the work within the time specified in the contract, or any extension, as specified in the clause entitled Default of this contract, the Contractor shall pay to the PHA as liquidated damages, the sum of \$ _____ [Contracting Officer insert amount] for each day of delay. If different completion dates are specified in the contract for separate parts or stages of the work, the amount of liquidated damages shall be assessed on those parts or stages which are delayed. To the extent that the Contractor's delay or nonperformance is excused under another clause in this contract, liquidated damages shall not be due the PHA. The Contractor remains liable for damages caused other than by delay.
- (b) If the PHA terminates the Contractor's right to proceed, the resulting damage will consist of liquidated damages until such reasonable time as may be required for final

completion of the work together with any increased costs occasioned the PHA in completing the work.

- (c) If the PHA does not terminate the Contractor's right to proceed, the resulting damage will consist of liquidated damages until the work is completed or accepted.

34. Termination for

- (a) The Contracting Officer may terminate this contract in whole, or in part, whenever the Contracting Officer determines that such termination is in the best interest of the PHA. Any such termination shall be effected by delivery to the Contractor of a Notice of Termination specifying the extent to which the performance of the work under the contract is terminated, and the date upon which such termination becomes effective.
- (b) If the performance of the work is terminated, either in whole or in part, the PHA shall be liable to the Contractor for reasonable and proper costs resulting from such termination upon the receipt by the PHA of a properly presented claim setting out in detail: (1) the total cost of the work performed to date of termination less the total amount of contract payments made to the Contractor; (2) the cost (including reasonable profit) of settling and paying claims under subcontracts and material orders for work performed and materials and supplies delivered to the site, payment for which has not been made by the PHA to the Contractor or by the Contractor to the subcontractor or supplier; (3) the cost of preserving and protecting the work already performed until the PHA or assignee takes possession thereof or assumes responsibility therefore; (4) the actual or estimated cost of legal and accounting services reasonably necessary to prepare and present the termination claim to the PHA; and (5) an amount constituting a reasonable profit on the value of the work performed by the Contractor.
- (c) The Contracting Officer will act on the Contractor's claim within days (60 days unless otherwise indicated) of receipt of the Contractor's claim.
- (d) Any disputes with regard to this clause are expressly made subject to the provisions of the Disputes clause of this contract.

35. Assignment of Contract

The Contractor shall not assign or transfer any interest in this contract; except that claims for monies due or to become due from the PHA under the contract may be assigned to a bank, trust company, or other financial institution. Such assignments of claims shall only be made with the written concurrence of the Contracting Officer. If the Contractor is a partnership, this contract shall inure to the benefit of the surviving or remaining member(s) of such partnership as approved by the Contracting Officer.

36. Insurance

- (a) Before commencing work, the Contractor and each subcontractor shall furnish the PHA with certificates of insurance showing the following insurance is in force and will insure all operations under the Contract:
 - (1) Workers' Compensation, in accordance with state or Territorial Workers' Compensation laws.
 - (2) Commercial General Liability with a combined single limit for bodily injury and property damage of not less than \$ _____ [Contracting Officer insert amount]

per occurrence to protect the Contractor and each subcontractor against claims for bodily injury or death and damage to the property of others. This shall cover the use of all equipment, hoists, and vehicles on the site(s) not covered by Automobile Liability under (3) below. If the Contractor has a "claims made" policy, then the following additional requirements apply: the policy must provide a "retroactive date" which must be on or before the execution date of the Contract; and the extended reporting period may not be less than five years following the completion date of the Contract.

(3) Automobile Liability on owned and non-owned motor vehicles used on the site(s) or in connection therewith for a combined single limit for bodily injury and property damage of not less than \$ _____

[Contracting Officer insert amount] per occurrence.

(b) Before commencing work, the Contractor shall furnish the PHA with a certificate of insurance evidencing that Builder's Risk (fire and extended coverage) Insurance on all work in place and/or materials stored at the building site(s), including foundations and building equipment, is in force. The Builder's Risk Insurance shall be for the benefit of the Contractor and the PHA as their interests may appear and each shall be named in the policy or policies as an insured. The Contractor in installing equipment supplied by the PHA shall carry insurance on such equipment from the time the Contractor takes possession thereof until the Contract work is accepted by the PHA. The Builder's Risk Insurance need not be carried on excavations, piers, footings, or foundations until such time as work on the superstructure is started. It need not be carried on landscape work. Policies shall furnish coverage at all times for the full cash value of all completed construction, as well as materials in place and/or stored at the site(s), whether or not partial payment has been made by the PHA. The Contractor may terminate this insurance on buildings as of the date taken over for occupancy by the PHA. The Contractor is not required to carry Builder's Risk Insurance for modernization work which does not involve structural alterations or additions and where the PHA's existing fire and extended coverage policy can be endorsed to include such work.

(c) All insurance shall be carried with companies which are financially responsible and admitted to do business in the State in which the project is located. If any such insurance is due to expire during the construction period, the Contractor (including subcontractors, as applicable) shall not permit the coverage to lapse and shall furnish evidence of coverage to the Contracting Officer. All certificates of insurance, as evidence of coverage, shall provide that no coverage may be canceled or non-renewed by the insurance company until at least 30 days prior written notice has been given to the Contracting Officer.

37. Subcontracts

(a) Definitions. As used in this contract -

(1) "Subcontract" means any contract, purchase order, or other purchase agreement, including modifications and change orders to the foregoing, entered into by a subcontractor to furnish supplies, materials, equipment, and services for the performance of the prime contract or a subcontract.

(2) "Subcontractor" means any supplier, vendor, or firm that furnishes supplies, materials, equipment, or services to or for the Contractor or another subcontractor.

(b) The Contractor shall not enter into any subcontract with any subcontractor who has been temporarily denied participation in a HUD program or who has been suspended or debarred from participating in contracting programs by any agency of the United States Government or of the state in which the work under this contract is to be performed.

(c) The Contractor shall be as fully responsible for the acts or omissions of its subcontractors, and of persons either directly or indirectly employed by them as for the acts or omissions of persons directly employed by the Contractor.

(d) The Contractor shall insert appropriate clauses in all subcontracts to bind subcontractors to the terms and conditions of this contract insofar as they are applicable to the work of subcontractors.

(e) Nothing contained in this contract shall create any contractual relationship between any subcontractor and the PHA or between the subcontractor and HUD.

38. Subcontracting with Small and Minority Firms, Women's Business Enterprise, and Labor Surplus Area Firms

The Contractor shall take the following steps to ensure that, whenever possible, subcontracts are awarded to small business firms, minority firms, women's business enterprises, and labor surplus area firms:

- (a) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
- (b) Ensuring that small and minority businesses and women's business enterprises are solicited whenever they are potential sources;
- (c) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses and women's business enterprises;
- (d) Establishing delivery schedules, where the requirements of the contract permit, which encourage participation by small and minority businesses and women's business enterprises; and
- (e) Using the services and assistance of the U.S. Small Business Administration, the Minority Business Development Agency of the U.S. Department of Commerce, and State and local governmental small business agencies.

39. Equal Employment Opportunity

During the performance of this contract, the Contractor/Seller agrees as follows:

(a) The Contractor/Seller shall not discriminate against any employee or applicant for employment because of race color, religion, sex, sexual orientation, gender identity, disability, or national origin.

(b) The Contractor/Seller shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, disability, or national origin. Such action shall include, but not be limited to, (1) employment, (2) upgrading demotion, (4) transfer, (5) recruitment or recruitment advertising, (6) layoff or termination, (7) rates of pay or other forms of compensation, and (8) selection for training, including apprenticeship

(c) The Contractor/Seller agrees to post in conspicuous places available to employees and applicants for employment the notices to be provided by the Contracting Officer setting forth the provisions of this nondiscrimination clause.

(d) The Contractor/Seller shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor/Seller, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(e) The Contractor/Seller shall send, to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, the notice to be provided by the Contracting Officer advising the labor union or workers' representative of the Contractor's commitments under this clause, and post copies of the notice in conspicuous places available to employees and applicants for employment.

(f) The Contractor/Seller shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.

(g) The Contractor/Seller shall furnish all information and reports required by Executive Order 11246, as amended, Section 503 of the Rehabilitation Act of 1973, as amended, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto. The Contractor/Seller shall permit

access to its books, records, and accounts by the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(h) In the event of a that the Contractor/Seller is in noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part and the contractor/seller may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(i) The contractor/seller will include the provisions of paragraphs (a) through (h) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each sub[contractor/seller] or vendor. The [contractor/seller] will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the [contractor/seller] becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the [contractor/seller] may request the United States to enter into such litigation to protect the interests of the United States.

(j) Compliance with the requirements of this clause shall be to the maximum extent consistent with, but not in derogation of, compliance with section 7(b) of the Indian Self-Determination and Education Assistance Act and the Indian Preference clause of this contract.

40. Employment, Training, and Contracting Opportunities for Low-Income Persons, Section 3 of the Housing and Urban Development Act of 1968.

(a) The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by Section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.

(b) The parties to this contract agree to comply with HUD's regulations in 24 CFR Part 75, which implement Section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the Part 75 regulations.

(c) The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this section 3 clause and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the Section 3 prioritization requirements and shall state the minimum percentages of labor hour requirements established in the Benchmark Notice (FR-6085-N-04).

(d) The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR Part 75, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR Part 75. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR Part 75.

(e) Noncompliance with HUD's regulations in 24 CFR Part 75 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

(f) Contracts, subcontracts, grants, or subgrants subject to Section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5307(b)) or subject to tribal preference requirements as authorized under 101(k) of the Native American Housing Assistance and Self-Determination Act (25 U.S.C. 4111(k)) must provide preferences in employment, training, and business opportunities to Indians and Indian organizations, and are therefore not subject to the requirements of 24 CFR Part 75.

41. Interest of Members of Congress

No member of or delegate to the Congress of the United States of America shall be admitted to any share or part of this contract or to any benefit that may arise therefrom.

42. Interest of Members, Officers, or Employees and Former Members, Officers, or Employees

No member, officer, or employee of the PHA, no member of the governing body of the locality in which the project is situated, no member of the governing body of the locality in which the PHA was activated, and no other public official of such locality or localities who exercises any functions or responsibilities with respect to the project, shall, during his or her tenure, or for one year thereafter, have any interest, direct or indirect, in this contract or the proceeds thereof.

43. Limitations on Payments made to Influence Certain Federal Financial Transactions

- (a) The Contractor agrees to comply with Section 1352 of Title 31, United States Code which prohibits the use of **Acts** Federal appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered Federal actions: the awarding of any Federal contract; the making of any Federal grant; the making of any Federal loan; the entering into of any cooperative agreement; or the modification of any Federal contract, grant, loan, or cooperative agreement.
- (b) The Contractor further agrees to comply with the requirement of the Act to furnish a disclosure (OMB Standard Form LLL, Disclosure of Lobbying Activities) if any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a Federal contract, grant, loan, or cooperative agreement.

44. Royalties and Patents

The Contractor shall pay all royalties and license fees. It shall defend all suits or claims for infringement of any patent rights and shall save the PHA harmless from loss on account thereof; except that the PHA shall be responsible for all such loss when a particular design, process or the product of a particular manufacturer or manufacturers is specified and the Contractor has no reason to believe that the specified design, process, or product is an infringement. If, however, the Contractor has reason to believe that any design, process or product specified is an infringement of a patent, the Contractor shall promptly notify the Contracting Officer. Failure to give such notice shall make the Contractor responsible for resultant loss.

45. Examination and Retention of Contractor's Records

- (a) The PHA, HUD, or Comptroller General of the United States, or any of their duly authorized representatives shall, until 3 years after final payment under this contract, have access to and the right to examine any of the Contractor's directly pertinent books, documents, papers, or other records involving transactions related to this contract for the purpose of making audit, examination, excerpts, and transcriptions.
- (b) The Contractor agrees to include in first-tier subcontracts under this contract a clause substantially the same as paragraph (a) above. "Subcontract," as used in this clause, excludes purchase orders not exceeding \$10,000.
- (c) The periods of access and examination in paragraphs (a) and (b) above for records relating to (1) appeals under the Disputes clause of this contract, (2) litigation or settlement of claims arising from the performance of this contract, or (3) costs and expenses of this contract to which the PHA, HUD, or Comptroller General or any of their duly authorized representatives has taken exception shall continue until disposition of such appeals, litigation, claims, or exceptions.

46. Labor Standards - Davis-Bacon and Related

If the total amount of this contract exceeds \$2,000, the Federal labor standards set forth in the clause below shall apply to the development or construction work to be performed under the contract.

- (a) Minimum Wages.
 - (1) All laborers and mechanics employed under this contract in the development or construction of the project(s) involved will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the regular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits in the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall

be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(2) (i) Any class of laborers or mechanics, including

helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when all the following criteria have been met: (A) The work to be performed by the classification requested is not performed by a classification in the wage determination; and (B) The classification is utilized in the area by the construction industry; and (C) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

- (ii) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employee Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary.
- (iii) In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator of the Wage and Hour Division for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary.
- (iv) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (a)(2)(ii) or (iii) of this clause shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in classification.
- (3) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- (4) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the

amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program; provided, that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

- (b) Withholding of funds. HUD or its designee shall, upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same prime Contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime Contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working in the construction or development of the project, all or part of the wages required by the contract, HUD or its designee may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the Contractor, disburse such amounts withheld for and on account of the Contractor or subcontractor to the respective employees to whom they are due.
- (c) Payrolls and basic records.
- (1) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working in the construction or development of the project. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made, and actual wages paid. Whenever the Secretary of Labor has found, under 29 CFR 5.5(a)(1)(iv), that the wages of any laborer or mechanic include the amount of costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(2) (i) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Contracting Officer for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under subparagraph (c)(1) of this clause. This information may be submitted in any form desired. Optional Form WH-347 (Federal Stock Number 029-005-00014-1) is available for this purpose and may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The Contractor is responsible for the submission of copies of payrolls by all subcontractors. (Approved by the Office of Management and Budget under OMB Control Number 1214-0149.)

(ii) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

- (A) That the payroll for the payroll period contains the information required to be maintained under paragraph (c) (1) of this clause and that such information is correct and complete;
 - (B) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3; and
 - (C) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (iii) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirements for submission of the "Statement of Compliance" required by subparagraph (c)(2)(ii) of this clause.
- (iv) The falsification of any of the above certifications may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 3729 of Title 31 of the United States Code.

(3) The Contractor or subcontractor shall make the records required under subparagraph (c)(1) available for inspection, copying, or transcription by authorized representatives of HUD or its designee, the Contracting Officer, or the Department of Labor and shall permit such representatives to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to

make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

- (d) (1) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship and Training, Employer and Labor Services (OATELS), or with a State Apprenticeship Agency recognized by OATELS, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by OATELS or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in this paragraph, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator of the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event OATELS, or a State Apprenticeship Agency recognized by OATELS, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (2) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under

the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed in the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate in the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate in the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate in the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (3) Equal employment opportunity. The utilization of apprentices, trainees, and journeymen under this clause shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.
- (e) Compliance with Copeland Act requirements. The Contractor shall comply with the requirements of 29 CFR Part 3, which are hereby incorporated by reference in this contract.
- (f) Contract termination; debarment. A breach of this contract clause may be grounds for termination of the contract and for debarment as a Contractor and a subcontractor as provided in 29 CFR 5.12.
- (g) Compliance with Davis-Bacon and related Act requirements. All rulings and interpretations of the Davis-Bacon and related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.
- (h) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this clause shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the PHA, HUD, the U.S. Department of Labor, or the employees or their representatives.
- (i) Certification of eligibility.
 - (1) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded contracts by the United States Government by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

- (2) No part of this contract shall be subcontracted to any person or firm ineligible for award of a United States Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (3) The penalty for making false statements is prescribed in the U. S. Criminal Code, 18 U.S.C. 1001.
- (j) Contract Work Hours and Safety Standards Act. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.
 - (1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics, including watchmen and guards, shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.
 - (2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the provisions set forth in subparagraph (j)(1) of this clause, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic (including watchmen and guards) employed in violation of the provisions set forth in subparagraph (j)(1) of this clause, in the sum of \$27 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by provisions set forth in subparagraph (j)(1) of this clause. DOL posts current fines at: <https://www.dol.gov/whd/govcontracts/cwhssa.htm#cmp>
 - (3) Withholding for unpaid wages and liquidated damages. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor under any such contract or any Federal contract with the same prime Contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime Contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the provisions set forth in subparagraph (j)(2) of this clause.
- (k) Subcontracts. The Contractor or subcontractor shall insert in any subcontracts all the provisions contained in this clause, and such other clauses as HUD or its designee may by appropriate instructions require, and also a clause requiring the subcontractors to include these provisions in any lower tier subcontracts. The prime Contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all these provisions.

47. Non-Federal Prevailing Wage Rates

(a) Any prevailing wage rate (including basic hourly rate and any fringe benefits), determined under State or tribal law to be prevailing, with respect to any employee in any trade or position employed under the contract, is inapplicable to the contract and shall not be enforced against the Contractor or any subcontractor, with respect to employees engaged under the contract whenever such non-Federal prevailing wage rate exceeds:

(1) The applicable wage rate determined by the Secretary of Labor pursuant to the Davis-Bacon Act (40 U.S.C. 3141 et seq.) to be prevailing in the locality with respect to such trade;

(b) An applicable apprentice wage rate based thereon specified in an apprenticeship program registered with the U.S. Department of Labor (DOL) or a DOL-recognized State Apprenticeship Agency; or

(c) An applicable trainee wage rate based thereon specified in a DOL-certified trainee program.

48. Procurement of Recovered Materials.

(a) In accordance with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, the Contractor shall procure items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition. The Contractor shall procure items designated in the EPA guidelines that contain the highest percentage of recovered materials practicable unless the Contractor determines that such items: (1) are not reasonably available in a reasonable period of time; (2) fail to meet reasonable performance standards, which shall be determined on the basis of the guidelines of the National Institute of Standards and Technology, if applicable to the item; or (3) are only available at an unreasonable price.

() Paragraph (a) of this clause shall apply to items purchased under this contract where: (1) the Contractor purchases in excess of \$10,000 of the item under this contract; or (2) during the preceding Federal fiscal year, the Contractor: (i) purchased any amount of the items for use under a contract that was funded with Federal appropriations and was with a Federal agency or a State agency or agency of a political subdivision of a State; and (ii) purchased a total of in excess of \$10,000 of the item both under and outside that contract.

**U.S. Department of Housing and Urban Development
LOW-RENT PUBLIC HOUSING**

**CERTIFICATE FROM CONTRACTOR APPOINTING OFFICER OR EMPLOYEE TO SUPERVISE
PAYMENT OF EMPLOYEES**

Project: Youngstown Metropolitan Housing Authority – Victory Estates Bathroom Rehabilitation

Name:

Date:

Location: 690 Magnolia Ave., Youngstown, Ohio 44505
Project # 60A25

(We) herby certify that (I am) (We are) (the prime contractor) (a subcontractor) for

(Company Name)

(Specify, "General Construction," "Plumbing," "Roofing." Etc. In connection with construction of the above-mentioned Low-Rent Housing Project, and that (I) (We) have appointed _____, whose signature appears below, to supervise the payment of (my) (our) employees beginning _____, 2026 That he is in a position to have full knowledge of the facts set forth in the payroll documents and in the statement of compliance required by the so-called Kick-Back Statute which he is to execute with (my) (our) full authority and approval until such time as (I) (We) submit to the Youngstown Metropolitan Housing Authority a new certificate appointing some other person for the purposes hereinabove state.

(Identifying Signature of Appointee)

Attest: (if required) _____
(Name of Firm or Corporation)

(Signature) By: _____ (Signature)

(Title) _____ (Title)

Note: This certificate must be executed by an authorized officer of a corporation or by a member of a partnership, and shall be executed prior to and be submitted with the first payroll. Should the appointee be changed, a new certificate must accompany the first payroll for which the new appointee executes a statement of compliance required by the Kick-Back Statute.

WAIVER OF LIEN

DATE _____

TO WHOM IT MAY CONCERN:

Please take notice that we, the undersigned laborers and mechanics, contractors or subcontractors that have been employed or that furnished the material that is now in position on the dwelling located at:

NUMBER	STREET	CITY
--------	--------	------

Do hereby release all rights of lien against said property and improvements now under course of construction on said property. We further certify that all our employees and suppliers have been paid in full for all labor and/or material furnished by us on said property or will have been within 30 working days of the above indicated date.

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

COMPANY NAME

REPRESENTATIVE'S SIGNATURE

DATE

AR820

CONTRACTOR'S WARRANTY

TO: Youngstown Metropolitan Housing Authority

FROM: _____

DATE: _____

RE: WARRANTY FOR: Victory Estates Bathroom Rehabilitation

In connection with the performance of the work under the Agreement, please be advised that I warrant that all materials, fixtures, and equipment furnished by me and by my subcontractors were new and of good quality and of good title. Should any defects appear within a year from the date of the final inspection which occurred on _____ and should such defects be caused by faulty materials, fixtures, equipment or work I shall promptly remedy these defects and pay for any damage to other work resulting therefrom. It is requested that you give notice to observed defects with reasonable promptness.

Sincerely,

CONTRACTOR

**SECTION 00 7315
RETAINAGE REQUIREMENTS**

PART 1 - GENERAL

1.01 SUMMARY

- A. This Section supplements the General Conditions of the Contract for Construction.

1.02 RETAINAGE REQUIREMENTS

- A. The Owner will pay ninety percent (92%) of amounts due on account of progress payments until the project is fifty percent (50%) complete, after which there is not additional retainage.
- B. The eight percent (8%) retained will be paid in full to the when the work is one hundred percent complete as determined by the Architect and accepted by the Owner.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION 00 7315

SECTION 00 7316
ALTERNATE 01: BUILD AMERICA, BUY AMERICA (BABA) REQUIREMENTS

PART 1 – GENERAL

1.1 SUMMARY

- A. Section includes requirements for Build America, Buy America (BABA) for the Project.

1.2 PAYMENT OF PREVAILING WAGE RATES

- A. The Build America, Buy America Act (BABA) requires that **all** iron and steel, construction materials, and manufactured products used in federally-funded infrastructure projects are produced in the United States. This requirement, known as the "Buy America Preference" (BAP), is detailed in the Infrastructure Investment and Jobs Act, Pub. L. 117-58 and 2 CFR 184.

1.3 DEFINITIONS

- A. **Build America, Buy America Act:** means division G, title 1X, subtitle A, parts 1-11, sections 70901 through 70927 of Infrastructure Investment and Jobs Act (Pub. L. 117-58).
- B. **Buy America Preference:** means the "domestic content procurement preference" set forth in section 70914 of the Build America, Buy America Act, which requires the head of each Federal agency to ensure that none of the funds made available for a Federal award for an infrastructure project may be obligated unless all of the iron, steel, manufactured products and construction materials incorporated into the project are produced in the United States.
- C. **Component:** means an article, material, or supply, whether manufactured or unmanufactured, incorporated directly into; a manufactured product; or, where applicable, an iron or steel product.
- D. **Construction Materials:** means articles, materials, or supplies that consist of only one of the items listed in paragraph (1) of this definition as provided in paragraph (2) of this definition. To the extent one of the items listed in paragraph (1) contains as inputs other items listed in paragraph (1), it is nonetheless a construction material.
1. The listed items are:
 - i. Non-ferrous metals
 - ii. Plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables)
 - iii. Glass (including optic glass)
 - iv. Fiber optic cable (including drop cable)
 - v. Optical fiber
 - vi. Lumber
 - vii. Engineered wood
 - viii. Drywall
 2. Minor additions of articles, materials, supplies, or binding agents to a construction material do not change the categorization of the construction material.
- E. **Infrastructure Project:** means any activity related to the construction, alteration, maintenance, or repair of infrastructure in the United States regardless of whether infrastructure is the primary purpose of the project. Infrastructure includes structures, facilities and affixed equipment for buildings and property that will serve a public function, are publicly owned and operated, are privately operated on behalf of the public, or are a place of public accommodation. An "infrastructure project" is defined as any activity related to the construction, alteration, maintenance or repair of infrastructure.
- F. **Iron or Steel Products:** means articles, materials, or supplies that consist wholly or predominantly of iron or steel or a combination of both.
- G. **Manufactured Products:** means:
 1. Articles, materials, or supplies that have been:
 - i. Processed into a specific form and shape; or
 - ii. Combined with other articles, materials, or supplies to create a product with different properties than the individual articles, materials, or supplies.

2. If an item is classified as an iron or steel product, a construction material, or a section 70917(c) material under 184.4€ and the definitions set forth in this section, then it is not a manufactured product. However, an article, material, or supply classified as a manufactured product under 184.4€ and paragraph (1) of this definition may include components that are construction materials, iron or steel products, or section 70917© materials.
- H. **Manufacturer:** means the entity that performs the final manufacturing process that produces a manufactured product.
- I. **Predominantly of Iron or Steel or a Combination of Both:** means that the cost of the iron and steel content exceeds 50 percent of the total cost of all its components. The cost of iron and steel is the cost of the iron or steel mill products (such as bar, billet, slab, wire, plate or sheet), casting, or forgings utilized in the manufacture of the product and a good faith estimate of the cost of iron or steel components.
- J. **Produced in the United States:** means
1. In the case of iron or steel products, all manufacturing processes, from the initial melting state through the application of coatings, occurred in the United States.
 2. In the case of manufactured products:
 - i. The product was manufactured in the United States; and
 - ii. The cost of the components of the manufactured precut that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard that meets or exceeds this standard has been established under applicable law or regulation for determining the minimum amount of domestic content of the manufactured product.
 3. In the case of construction materials, all manufacturing processes for the construction materials occurred in the United States.
- K. **Section 70917(c) Materials:** means cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives.

1.4 PROJECT SPECIFIC WAIVER

- A. HUD has stated that project-specific waivers are available on a limited case-by-case basis. If a Contactor feels that a submission of a project-specific waiver is necessary, the Contractor is to submit a request with supporting documentation to the Architect and Owner.

1.5 SUBMITTAL REQUIREMENTS

- A. The Contractor shall submit the following documentation for each article, material or supply that must meet the BABA requirements stated above:
1. A certificate from the manufacturer or reseller that the product complies.
 2. For products that cost less than \$100 per product, a copy of the label that indicates the product was made in the United States is acceptable to HUD.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION 00 7316

**SECTION 01 1000
GENERAL REQUIREMENTS**

PART 1—GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of the contract including General, Supplementary and Special Conditions and other Division 01 Specification sections apply to work of this section.

1.2 PROJECT DESCRIPTION

- A. The Work includes rehabilitation at the following location in accordance with the Drawings and as specified (Refer also to Section 01 1100 Summary of Work):
Victory Estates – Bathroom Rehabilitation
690 Magnolia Ave.
Youngstown, OH 44505
- B. The Owner is:
Youngstown Metropolitan Housing Authority
131 W. Boardman St.
Youngstown, OH 44503
- C. The Architect is:
TC Architects
430 Grant Street
Akron, OH 44311
Attention: Susan Allen, AIA, ASID, IIDA, LEED AP BD+C, EDAC

1.3 CONTRACTING METHOD

- A. Contracting Method: The Work of the Project shall be performed under a single prime contractor.

1.4 SITE RESTRICTIONS

- A. Housing Agency Occupancy: The Housing Agency will occupy the site throughout the construction period.
 - 1. The existing facilities are (62) occupied public housing units. The Contractor will have access to each unit between the hours of 8:00 AM and 4:30 PM. At the end of each work day, the Contractor shall leave unfinished work in a safe and clean condition until work can be resumed the next day. This includes removing all tools and loose materials from the premises and leaving the premises in a clean condition.
 - 2. The Housing Agency will designate an area on the site for the Contractor's staging requirements. The Housing Agency may direct the Contractor at any time to re-locate materials, vehicles, and equipment to maintain the Housing Agency's daily operations. The Contractor may stage materials adjacent to individual buildings for convenience; locations are subject to the Housing Agency's approval.
 - 3. Advise the Housing Agency if certain construction operations will generate noise, dust, fumes, or other conditions that may disrupt the Housing Agency's operations.
 - a. Confer with the Housing Agency before scheduling such construction operations.
 - 4. Keep egress paths clear at all times.
 - 5. Do not interrupt safety or security systems.
- B. Clean work areas and remove construction debris from the site on a daily basis.

1.5 PRICE AND PAYMENT PROCEDURES

- A. Refer also to Section 01 2900 Payment Procedures.
- B. Contract Modifications: Requests for proposals, supplementary instructions, and change orders will be prepared by the Architect in accordance with the Conditions of the Contract. Use forms acceptable to the Housing Agency.

- C. Payment Procedures.
 - 1. Within seven (7) days following written authorization to proceed with the Work, submit the following:
 - a. Construction Schedule: A proposed schedule including milestone Project Dates.
 - b. Insurance Certificates.
 - c. Performance and Payment Bonds.
 - d. Schedule of Values (Contract Cost Breakdown).
 - e. Product schedule: A list of major project components. Include names of manufacturers and products to be used.
 - f. Contractor's personnel list: Major personnel to be actively participating in the Project.
 - 2. Submit payment applications on forms specified in Administrative Requirements article below. Comply with the Owner's special requirements for waivers of lien from subcontractors and suppliers.
- D. Contract Modifications will comply with the Housing Agency's requirements and /or be administered with the following forms:
 - 1. Request for Information (RFI): AIA Document G716, Request for Information, or Architect's standard form.
 - 2. Change Order: AIA Document G701, this form will be used for authorizing changes in the work.
 - 3. Work Changes (RFP): AIA Document G709, Work Changes Proposal Request.
 - 4. Supplemental Instructions: AIA Document G710, Architect's Supplemental Instructions.

1.6 ADMINISTRATIVE REQUIREMENTS

- A. Refer also to Section 01 3000 Administrative Requirements.
- B. Contract Administrative Documents: The following documents will be used in the administration of this Project.
 - 1. Performance and Payment Bond: Complying with ORC 153.54.
 - 2. Payment Application and Schedule of Values: AIA Document G702, Application and Certificate for Payment and G703, Continuation Sheet or HUD-51001.
 - 3. Change Order: AIA Document G701, Change Order.
 - 4. AIA Document G706, Contractor's Affidavit of Payment of Debts and Claims.
 - 5. AIA Document G706a, Contractor's Affidavit of Release of Liens.
 - 6. AIA Document G707, Consent of Surety Company to Final Payment.
- C. Construction Scheduling: Provide a schedule with the following Milestone Dates:
 - 1. Date of commencement of the Work.
 - 2. Start and end dates of major construction activities.
 - 3. Meeting dates.
 - 4. Key submittal dates - major components.
 - 5. Inspection dates.
 - 6. Project completion date.
- D. Construction Progress Reporting: Submit weekly reports on the progress of the work to the Owner and the Architect. Attend meetings scheduled by the Owner and the Architect to review completed work.
- E. Construction Supervisor: Employ a full-time construction supervisor to be on the site at all times while the Project is under construction.
 - 1. Provide the Contractor's 24-hour emergency telephone number.

1.7 EXISTING CONDITIONS DOCUMENTATION

- A. Document objectionable conditions not indicated in the Contract Documents, including damage that is in evidence prior to construction.
 - 1. Send copies to the Architect and Owner. Review conditions prior to commencing Work.

1.8 SUBMITTALS

- A. Refer to Section 01 3300 Submittal Procedures.

1.9 QUALITY REQUIREMENTS

- A. Refer also to Section 01 4000 Quality Requirements.
- B. Installer Qualifications: Engage only qualified installers to perform work. Submit qualification statements for subcontractors engaged for each of the following trades:
 - 1. Carpentry, siding, and trim.
 - 2. Concrete work
 - 3. Masonry work.
- C. Regulatory Requirements: Comply with requirements of authorities having jurisdiction.
- D. Source Limitation: Obtain each type of specified product from a single qualified manufacturer and distribution source.

1.10 REFERENCES

- A. Refer also to Section 01 4100 Regulatory Requirements.
- B. Standards specified in the Contract Documents are incorporated by reference. Editions current as of the date of the Agreement will apply.

1.11 TEMPORARY FACILITIES AND CONTROLS

- A. See Also Section 01 5000 Temporary Facilities and Controls.
- B. Provide and maintain temporary protections and controls required for maintaining construction operations, protecting areas outside the limits of construction, protecting the general public and the Owner's personnel, and existing construction and landscaping, including
 - 1. Temporary protection to prevent damage to the site and building during work.
 - 2. Construction waste management: Provide waste collection and removal adequate for the Project. Locate dumpsters only in locations approved by the Owner.
 - 3. Sanitary facilities: Provide temporary toilets.
 - 4. Fences, barricades, and warnings. As required for adequate protection of the Work and the public.
- C. The Contractor may use existing electrical utilities on the site, provided that such use does not adversely affect the Owner's use of the same. Supplement existing utilities with temporary utilities if necessary and at no additional cost to the Owner.
- D. Contractor to repair or restore any damage to areas of the site at their own cost after removing temporary facilities and controls.

1.12 COMMON PRODUCT REQUIREMENTS

- A. Furnish new products in manufacturer's standard unit dimensions, unless specifically identified otherwise in the Contract Documents. Scraps, remnants, salvage, or otherwise objectionable materials will be rejected.
- B. Source Limitations: Provide products of a single manufacturer and obtained through manufacturer-authorized sources. Do not interchange sources or manufacturers of similar items.
- C. Furnish products complete, with necessary fasteners, accessories, installation devices, and appurtenances required for a complete installation.
- D. Equipment and material shall be protected by and be the responsibility of the Contractor until formally accepted by the Owner.

1.13 MATCHING EXISTING CONSTRUCTION

- A. Where work results are specified to match existing construction, the criteria for acceptability will include the following:
 - 1. Aesthetic characteristics, including color, surface texture, and pattern.
 - 2. Physical characteristics, including dimensions, material composition, and density.
 - 3. Performance characteristics, including general durability; resistance to weathering or abrasion; compliance with reference standards and codes; equivalence of warranty; and certification by testing agencies.

1.14 DELIVERY, STORAGE, AND HANDLING

- A. Schedule deliveries consistent with the progress of the Work.
- B. Deliver products in original packaging or bundles and labeled so as to be readily identifiable.
- C. Inventory products upon receipt to ensure that adequate quantities are delivered.
- D. Reject defective, broken, deteriorated, or otherwise objectionable products. Remove from the site.
- E. Review manufacturer's literature and referenced standards to verify the optimum conditions for proper and secure storage of each type of product to prevent deterioration, theft, or loss.
- F. Handle products according to referenced standards and manufacturer's current published instructions.

1.15 EXAMINATION

- A. Before installation, review the condition of the substrate or area of installation provided and verify that it is acceptable according to the product manufacturer's instructions, referenced standards, and accepted trade practices.
 - 1. Verify condition of reinforcement, blocking, nailers, or other components required for supporting work are properly placed.
 - 2. Correct unfavorable conditions.
 - 3. Commencing work in an area will be considered Contractor's acceptance of the existing conditions .
- B. If unfavorable conditions are discovered, the Contractor may propose corrective work according to the Conditions of the Contract. The Contractor's proposal will be rejected if the conditions were foreseeable or reasonably inferrable from the Contract Documents and other documented information.

1.16 SELECTIVE DEMOLITION

- A. See Also Section 02 4119 Selective Demolition.
- B. Perform selective demolition necessary to execute work results, according to the Construction Schedule.
- C. Do not cut or remove structural members. Shore and brace construction to remain in place to prevent collapse.

1.17 PREPARING

- A. Prepare materials according to referenced standards and manufacturer's instructions. Mix or arrange materials for uniform blending and optimum appearance.
 - 1. Provide uniform surface patterns. Provide uniform joint thicknesses. Locate openings, joints, returns, and offsets accurately.
- B. Surface Preparation:
 - 1. Furnish, install, and maintain temporary protection of people and property in the vicinity of the Work. Protect existing adjacent work results.
 - 2. Prepare substrates according to manufacturer's instructions, referenced standards, and trade practices acceptable to the Architect.
 - 3. Use standard test methods to ascertain that substrates are ready for Work.
 - 4. Correct deficiencies identified by the Architect or the manufacturer's representative before proceeding. Failure to correct deficiencies may result in rejection of Work.

1.18 EXECUTING WORK RESULTS

- A. Verify the manufacturer's acceptance of installers for executing the documented work results requirements.
- B. Execute work results according to the Contract Documents.

1. When special warranties are specified, execute work results according to the manufacturer's warranty requirements.
- C. Execute work results according to the approved Construction Schedule.
- D. Refer to Section 01 7000 – Execution Requirements for additional requirements.

1.19 CUTTING AND PATCHING

- A. Preparation: Install temporary partitions or dust barriers to prevent migration of dust, debris, and fumes.
- B. Cut, fit, and patch as necessary to expedite the Work and to correct defects. Use appropriate tools and methods that will not damage adjoining work.
- C. Use patching techniques that will reduce differences with adjoining surfaces. Review patched surfaces with the Architect for acceptability.

1.20 INSPECTION

- A. Schedule inspections required by authorities having jurisdiction over the Project.
- B. When review and inspection of work results by a manufacturer's representative is a condition of a special project warranty, schedule and attend such reviews and inspections.
- C. Correct deficiencies in work results documented in inspection reports.

1.21 CLEANING

- A. Progress Cleaning: As the Work progresses, clean executed work results to maintain their condition. Use cleaning methods that have been approved by the product manufacturers.
- B. Daily and Final Cleaning of the Site: Refer to the Conditions of the Contract.

1.22 PROTECTING

- A. Protect Work from damage, deterioration, vandalism, and theft. Upon final acceptance of the Work, remove temporary protections from the Project site.
- B. Repair, at contractor's own expense, any damage to the Work, including from deterioration, vandalism, or theft during the project dates of execution. Repair any damage to property outside of the area of work due to execution of the work, improper protection of the adjacent areas and other work not in the contract, or accident during execution of the work.

1.23 ADDITIONAL BUILDING ENVELOPE REQUIREMENTS:

- A. Back-prime and weather-proof components installed as part of building shell, substructure and foundation construction.
- B. Weatherproofing includes but is not limited to membranes, mastics, flashing, sealants, and coatings as indicated on the Drawings, specified in subsequent Sections, required by authorities having jurisdiction, and recommended by referenced standards and manufacturers.
- C. Seal the backs and edges of wood and other potentially absorptive materials that will be exposed to the weather and damp or humid conditions.
 1. Isolate dissimilar metals from each other to prohibit galvanic action with felts or other similar materials whether indicated or not.
 2. Isolate metals and other corrosion-sensitive materials from components containing deleterious or otherwise reactive chemicals, including but not limited to pressure-treated wood, solvents, and incompatible sealants.
- D. Fill voids and annular spaces between dissimilar building components with insulation, gaskets, and joint fillers to assure the moisture resistance, thermal performance, and acoustical performance qualities of the building.
- E. Fill and seal all voids around penetrations through the building exterior.
- F. Assure that fasteners selected are of the correct type for the applications indicated, are corrosion-resistant, and will not react with the penetrated substrates when installed. Space fasteners appropriately. Provide pre-finished fasteners when required for aesthetic effect.

- G. Account for thermal movement of installed materials in executing the Work. Incorporate washers, gaskets, movement joints, and other appropriate means according to manufacturer instructions and referenced standards.
- H. Unless otherwise indicated, do not paint, stain, or otherwise coat metals that have received a defined finish and are intended to remain exposed.
- I. Refer to subsequent Sections and the manufacturer's instructions for additional requirements.

1.24 CONTRACT CLOSEOUT PROCEDURES

- A. Refer to Sections 01 7000 – Execution Requirements and 01 7800 – Closeout Submittals.
- B. Final Cleaning and Restoration: Clean and restore the Site to a condition acceptable to the Owner according to the Conditions of the Contract.

1.25 TESTING AND COMMISSIONING

- A. Correct deficiencies at no additional cost to the Owner.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION 01 1000

**SECTION 01 1100
SUMMARY OF WORK**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of the contract including General, Supplementary and Special Conditions and other Division 01 Specification sections apply to work of this section.

1.2 PROJECT IDENTIFICATION

A. The Project is:

Victory Estates – Bathroom Rehabilitation
690 Magnolia Ave.
Youngstown, OH 44505

B. See attached Section 01 1100 Project Map for location of units.

1.3 RESTORATION AND NEW WORK

A. Work under this contract shall consist of furnishing all labor, access to the work, materials, and equipment necessary for the interior renovation of sixty-two (62) bathrooms including but not limited to:

1. Licenses, permits, inspections and fees required by authorities having jurisdiction.
2. Temporary facilities and controls necessary for coordination and management of the site and work.
3. Carpentry, cabinetry, and casework.
4. Finishes
5. Specialties and accessories
6. Plumbing
7. HVAC
8. Electrical work.
9. Final cleaning.
10. Final closeout procedures.

1.4 WORK SEQUENCE

A. Work shall proceed in a continuous and orderly manner.

B. Construction will be phased. The Contractor shall coordinate with the Public Housing Authority to establish a project schedule that works with their relocation of building residents. It is the goal of YMHA to provide the contractor with all of the units in one building per phase.

1.5 CONTRACTOR USE OF PREMISES

A. Limit use of premises to construction operations to be coordinated with the Owner.

B. Coordinate use of premises under direction of the Public Housing Agency.

C. The Contractor shall be held liable for any damages to the building, existing materials, the building contents, landscaping and grounds, or its occupancy resulting from work under this Contract.

D. Contractor may work overtime at its own expense, provided that such action does not conflict with the building usage and prior approval is obtained.

E. Work may be performed between the hours of 8:00 a.m. and 4:30 p.m. Monday through Friday. Alternative hours and days must be reviewed and approved by the Public Housing Agency.

1. Early Morning Hours: As allowed by management with 72 hours' notice.
2. Hours for Utility Shutdowns: To be determined during pre-construction meeting.
3. Hours for Core Drilling: To be determined during pre-construction meeting.

F. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:

1. Notify Owner not less than five (5) days in advance of proposed utility interruptions.
2. Obtain Owner's written permission before proceeding with utility interruptions.

- G. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to occupancy with Owner.
 - 1. Notify Owner not less than two days in advance of proposed disruptive operations.
 - 2. Obtain Owner's written permission before proceeding with disruptive operations.
- H. Nonsmoking Buildings: Smoking is not permitted on Youngstown MHA property.
- I. Controlled Substances: Use of tobacco products and other controlled substances on Project site is not permitted.
- J. Employee Identification: Provide identification tags for Contractor personnel working on Project site. Require personnel to use identification tags at all times.
- K. Employee Screening: Comply with Owner's requirements for drug and background screening of Contractor personnel working on Project site.
 - 1. Maintain list of approved screened personnel with Owner's representative.

1.6 OCCUPANCY

- A. Construction will be phased. During construction residents will be relocated to necessitate work. Residents' belongings will remain in the units during construction and must remain undisturbed. Coordinate construction schedule with the Public Housing Authority to determine the order in which units / buildings will be vacated.

1.7 COORDINATION

- A. Coordinate work of the various sections of specifications to assure efficient and orderly sequence of installation of materials.
- B. Coordinate work under this contract with other contract work relating to the same building areas to assure efficient and orderly sequence of installation of materials.

1.8 REFERENCE STANDARDS

- A. Products specified by association or trade standards must comply with those standards, except when more rigid requirements are specified herein or are required by applicable codes.
- B. The date of the standard is that which is in effect as of the bid date, except when a specific date is stated.
- C. Should there be a discrepancy between the referenced standards and these contract documents, the latter shall govern unless written interpretation is obtained from the Public Housing Agency's representative.
- D. Should there be discrepancies among the referenced standards the more stringent requirements shall govern.

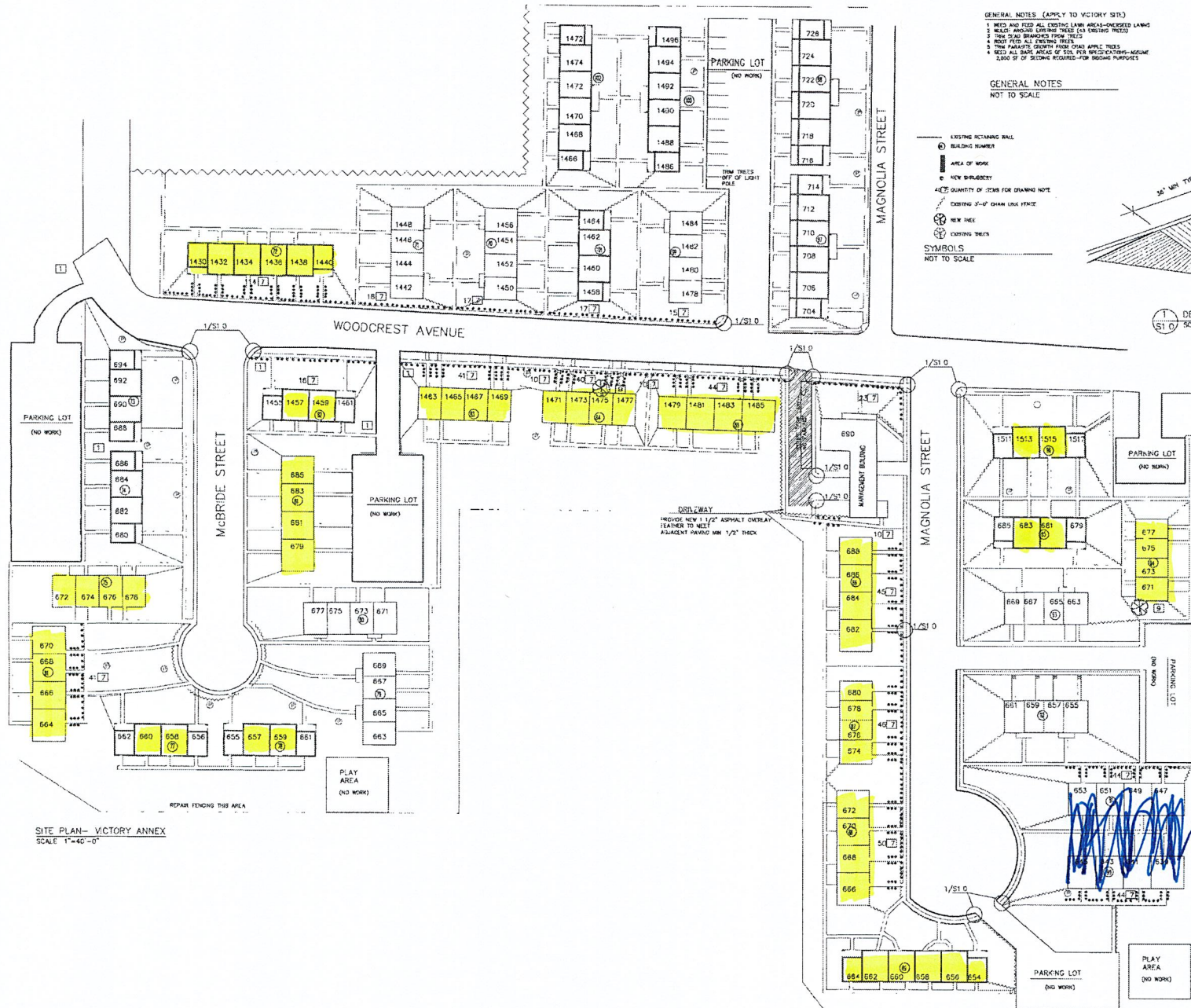
PART 2 - PRODUCTS

2.1 PRODUCTS, GENERAL

- A. Comply with the Conditions of the Contract and provisions for each Contract in the Technical Specifications.

PART 2 - EXECUTION – NOT USED

END OF SECTION 01 1100



GENERAL NOTES (APPLY TO VICTORY STL.)

1. VERIFY AND TIE-UP ALL EXISTING LINES AND UNDEVELOPED LOTS
2. REMOVE AND RELOCATE EXISTING TREES (AS EXISTING TREES)
3. PRESERVE EXISTING TREES (AS EXISTING TREES)
4. PRESERVE EXISTING TREES (AS EXISTING TREES)
5. PRESERVE EXISTING TREES (AS EXISTING TREES)
6. PRESERVE EXISTING TREES (AS EXISTING TREES)
7. PRESERVE EXISTING TREES (AS EXISTING TREES)
8. PRESERVE EXISTING TREES (AS EXISTING TREES)
9. PRESERVE EXISTING TREES (AS EXISTING TREES)
10. PRESERVE EXISTING TREES (AS EXISTING TREES)

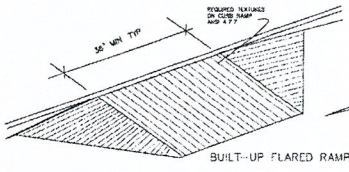
GENERAL NOTES
NOT TO SCALE

DRAWING NOTES

1. PROVIDE NEW WALKWAYS (REFER TO DRAWING FOR QUANTITIES)
2. PROVIDE 3'-0" CHAIN LINK FENCE
3. PROVIDE NEW DRIVE (SPACE AWAY FROM BUILDING)
4. PROVIDE EXISTING 2'-0" FISH SCALE (NO TYPING)
5. PROVIDE NEW WALKWAY SURFACES IN FRONT OF GAS METERS (REFER TO DRAWING FOR QUANTITIES)
6. PROVIDE NEW WALKWAY FILL AT BUILDING
7. PROVIDE NEW TREES, BUSHES AND PALM TREES (REFER 1/2" D)
8. REMOVE EXISTING TREES WITH NEW TREES AS SPECIFIED
9. REMOVE TREE AND STUMP-SEED AREA OF WORK
10. PROVIDE FILL AT CORNER 5' MIN WALK

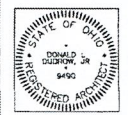
DRAWING NOTES
NOT TO SCALE

- EXISTING RECTANGULAR WALL
 - BUILDING NUMBER
 - AREA OF WORK
 - NEW SUBURBITY
 - QUANTITY OF TREES FOR DRAWING NOTE
 - QUANTITY OF TREES FOR CHAIN LINK FENCE
 - NEW TREE
 - EXISTING TREE
- SYMBOLS
NOT TO SCALE



1. DETAIL AT NEW CURB CUT
SCALE: 1/2" = 1'-0"

SITE PLAN - VICTORY ANNEX
SCALE 1" = 40'-0"



CREATIVE HOUSING SOLUTIONS, INC.
 935 LENOX PLACE, CINCINNATI, OHIO 45229
 (613) 961-4400 FAX: (613) 961-2233

Drawn By: [Signature] Scale: 1/4" = 1'-0"
 Project Number: 017
 Date: 11/24/24

SITENETWORK AT VICTORY ANNEX
 YOUNGSTOWN METROPOLITAN HOUSING AUTHORITY
 131 West Barabain Street, Youngstown, Ohio 44503-1899

REVISIONS		
NO.	REASON	DATE

SHEET TITLE
SITE PLAN VICTORY

SHEET NUMBER
51.0

77

**SECTION 01 2100
ALLOWANCES**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.
- B. Types of allowances include the following:
 - 1. Lump-sum allowances.

1.2 SELECTION AND PURCHASE

- A. At the earliest practical date after award of the Contract, advise Architect of the date when final selection, or purchase and delivery, of each product or system described by an allowance must be completed by the Owner to avoid delaying the Work.
- B. At Architect's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.
- C. Purchase products and systems selected by Architect from the designated supplier.

1.3 ACTION SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances in the form specified for Change Orders.

1.4 INFORMATIONAL SUBMITTALS

- A. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.
- B. Submit time sheets and other documentation to show labor time and cost for installation of allowance items that include installation as part of the allowance.
- C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

1.5 LUMP-SUM ALLOWANCES

- A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner or selected by Architect under allowance and shall include freight and delivery to Project site.
- B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by Owner or selected by Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.

1.6 ADJUSTMENT OF ALLOWANCES

- A. Allowance Adjustment: To adjust allowance amounts, prepare a Change Order proposal based on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place where applicable. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.
 - 1. Include installation costs in purchase amount only where indicated as part of the allowance.
 - 2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other markups.
 - 3. Submit substantiation of a change in scope of Work, if any, claimed in Change Orders related to unit-cost allowances.
 - 4. Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.
- B. Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the purchase order amount or Contractor's handling, labor, installation, overhead, and profit.

1. Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of Work has changed from what could have been foreseen from information in the Contract Documents.
2. No change to Contractor's indirect expense is permitted for selection of higher- or lower-priced materials or systems of the same scope and nature as originally indicated.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

- A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES (NOT USED)

END OF SECTION 01 2100

**SECTION 01 2500
SUBSTITUTION PROCEDURES**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for substitutions.
- B. Related Requirements:
 - 1. Section 01 6000 – Product Requirements, for requirements for submitting comparable product submittals for products by listed manufacturers.

1.2 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
 - 1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
 - 2. Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required in order to meet other Project requirements but may offer advantage to Contractor or Owner.

1.3 ACTION SUBMITTALS

- A. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Statement indicating why specified product or fabrication or installation method cannot be provided, if applicable.
 - b. Coordination of information, including a list of changes or revisions needed to other parts of the Work and to construction performed by Owner and separate contractors that will be necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitutions with those of the Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include attributes, such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
 - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - e. Samples, where applicable or requested.
 - f. Certificates and qualification data, where applicable or requested.
 - g. List of similar installations for completed projects, with project names and addresses as well as names and addresses of architects and owners.
 - h. Material test reports from a qualified testing agency, indicating and interpreting test results for compliance with requirements indicated.
 - i. Research reports evidencing compliance with building code in effect for Project.
 - j. Detailed comparison of Contractor's construction schedule using proposed substitutions with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
 - k. Cost information, including a proposal of change, if any, in the Contract Sum.

- l. Contractor's certification that proposed substitution complies with requirements in the Contract Documents, except as indicated in substitution request, is compatible with related materials and is appropriate for applications indicated.
 - m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
2. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within seven (7) days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within (15) days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
- a. Forms of Acceptance: Change Order, Construction Change Directive, or Architect's Supplemental Instructions for minor changes in the Work.
 - b. Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.

1.4 QUALITY ASSURANCE

- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

1.5 PROCEDURES

- A. Coordination: Revise or adjust affected work as necessary to integrate work of the approved substitutions.

1.6 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than **(15)** days prior to time required for preparation and review of related submittals.
 - 1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
 - a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - b. Substitution request is fully documented and properly submitted.
 - c. Requested substitution will not adversely affect Contractor's construction schedule.
 - d. Requested substitution has received necessary approvals of authorities having jurisdiction.
 - e. Requested substitution is compatible with other portions of the Work.
 - f. Requested substitution has been coordinated with other portions of the Work.
 - g. Requested substitution provides specified warranty.
 - h. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
- B. Substitutions for Convenience: Not allowed, unless otherwise indicated.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION 01 2500

**SECTION 01 2600
CONTRACT MODIFICATION PROCEDURES**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for handling and processing Contract modifications.

1.2 MINOR CHANGES IN THE WORK

- A. Architect will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on **AIA Document G710**.

1.3 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
1. Work Change Proposal Requests issued by Architect are not instructions either to stop work in progress or to execute the proposed change.
 2. Within time specified in Proposal Request after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include costs of labor and supervision directly attributable to the change.
 - d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Architect.
1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 4. Include costs of labor and supervision directly attributable to the change.
 5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.

1.4 CHANGE ORDER PROCEDURES

- A. On Owner's approval of a Work Change Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on AIA Document G701.

1.5 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: Architect may issue a Construction Change Directive on AIA Document G714. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.

1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

1.6 WORK CHANGE DIRECTIVE

- A. Work Change Directive: Architect may issue a Work Change Directive. Work Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 1. Work Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Work Change Directive.
 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION 01 2600

**SECTION 01 2900
PAYMENT PROCEDURES**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.

1.3 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.
 - 1. Coordinate line items in the schedule of values with items required to be indicated as separate activities in Contractor's construction schedule.
 - 2. Submit the schedule of values to Architect at earliest possible date, but no later than **seven** days before the date scheduled for submittal of initial Applications for Payment.
- B. Format and Content: Use Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.
 - 1. Arrange schedule of values consistent with format of **HUD form documents**.
 - 2. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Provide multiple line items for principal subcontract amounts in excess of five > percent of the Contract Sum.
 - 3. Provide a separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
 - a. Differentiate between items stored on-site and items stored off-site.
 - 4. Allowances: Provide a separate line item in the schedule of values for each allowance. Show line-item value of unit-cost allowances, as a product of the unit cost, multiplied by measured quantity. Use information indicated in the Contract Documents to determine quantities.
 - 5. Overhead Costs: Include total cost and proportionate share of general overhead and profit for each line item.
 - 6. Overhead Costs: Show cost of temporary facilities and other major cost items that are not direct cost of actual work-in-place as separate line items.
 - 7. Closeout Costs. Include separate line items under Contractor and principal subcontracts for Project closeout requirements in an amount totaling 5 percent of the Contract Sum and subcontract amount.
 - 8. Schedule of Values Revisions: Revise the schedule of values when Change Orders or Construction Change Directives result in a change in the Contract Sum. Include at least one separate line item for each Change Order and Construction Change Directive.

1.4 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment following the initial Application for Payment shall be consistent with previous applications and payments as certified by Architect and paid for by Owner.
- B. Payment Application Times: The date for each progress payment is indicated in the Agreement between Owner and Contractor. The period of construction work covered by each Application for Payment is the period indicated in the Agreement.
- C. Payment Application Times: Submit Application for Payment to Architect by the last day of the month. The period covered by each Application for Payment is one month, ending on the last day of the month.
 - 1. Submit draft copy of Application for Payment seven days prior to due date for review by Architect.

- D. Application for Payment Forms: Use HUD form documents for Applications for Payment.
- E. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect will return incomplete applications without action.
 - 1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
 - 2. Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.
 - 3. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
- F. Transmittal: Submit three signed and notarized original copies (or in digital format if approved by Owner), of each Application for Payment to Architect by a method ensuring receipt. One copy shall include waivers of lien and similar attachments if required.
 - 1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- G. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from entities lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment, as required by Owner.
 - 1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
 - 2. When an application shows completion of an item, submit conditional final or full waivers.
 - 3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
 - 4. Submit final Application for Payment with or preceded by conditional final waivers from every entity involved with performance of the Work covered by the application who is lawfully entitled to a lien.
 - 5. Waiver Forms: Submit executed waivers of lien on forms acceptable to Owner.
- H. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
 - 1. List of subcontractors.
 - 2. Schedule of values.
 - 3. Contractor's construction schedule (preliminary if not final).
 - 4. Products list (preliminary if not final).
 - 5. Submittal schedule (preliminary if not final).
 - 6. List of Contractor's staff assignments.
 - 7. List of Contractor's principal consultants.
 - 8. Copies of building permits.
 - 9. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
 - 10. Initial progress report.
 - 11. Report of preconstruction conference.
 - 12. Certificates of insurance and insurance policies.
 - 13. Performance and payment bonds.
 - 14. Data needed to acquire Owner's insurance.
- I. Application for Payment at Substantial Completion: After Architect issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
 - 1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
 - 2. This application shall reflect Certificate(s) of Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- J. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:

1. Evidence of completion of Project closeout requirements.
2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
3. Updated final statement, accounting for final changes to the Contract Sum.
4. Affidavit of payment.
5. Affidavit of release of liens.
6. Consent of surety.
7. Evidence that claims have been settled.
8. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.
9. Final liquidated damages settlement statement.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION 01 2900

**SECTION 01 3000
ADMINISTRATIVE REQUIREMENTS**

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Preconstruction meeting.
- B. Progress meetings.
- C. Construction progress schedule.
- D. Coordination drawings.
- E. Submittal procedures.

1.2 RELATED REQUIREMENTS

- A. Section 01 1100 – Summary of Work.
- B. Section 01 3300 – Submittal Procedures

1.3 PROJECT COORDINATION

- A. During construction, coordinate use of site and facilities according to the Public Housing Agency's requirements.
- B. Make the following types of submittals to Architect:
 - 1. Requests for interpretation.
 - 2. Requests for substitution.
 - 3. Shop drawings, product data, and samples.
 - 4. Test and inspection reports.
 - 5. Manufacturer's instructions and field reports.
 - 6. Applications for payment and change order requests.
 - 7. Progress schedules.
 - 8. Coordination drawings.
 - 9. Closeout submittals.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.1 ELECTRONIC SUBMITTAL PROCEDURES

- A. All documents transmitted for purposes of administration of the contract are to be in electronic (PDF) format.
 - 1. This procedure applies to pre-construction submittals, requests for information (RFIs), progress documentation, contract modification documents (e.g. supplementary instructions, change proposals, change orders), applications for payment, field reports and meeting minutes, and any other document any participant wishes to make part of the project record.
 - 2. It is Contractor's responsibility to submit documents in PDF format.
 - 3. Paper document transmittals will not be reviewed; emailed PDF documents will be reviewed.
 - 4. All other specified submittal and document transmission procedures apply, except that electronic document requirements do not apply to samples or color selection charts.

3.2 PRECONSTRUCTION MEETING

- A. Architect will schedule a meeting after Notice of Award.
- B. Attendance Required:
 - 1. Public Housing Agency.
 - 2. Architect.
 - 3. Contractor.
- C. Agenda:
 - 1. Submission of executed bonds and insurance certificates.
 - 2. Distribution of Contract Documents.

3. Submission of list of Subcontractors, list of Products, schedule of values, and progress schedule.
 4. Designation of personnel representing the parties to the Contract and Architect.
 5. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
 6. Scheduling.
 7. Mobilization on site, parking and staging, and use of Public Housing Agency-provided power and water.
- D. Record minutes and distribute copies within three days after meeting to participants, with copies to Architect, Public Housing Agency, participants, and those affected by decisions made.

3.3 PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the Work at intervals determined by the Architect and Public Housing Agency.
- B. Architect will make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.
- C. Attendance Required: Job superintendent, major Subcontractors and suppliers, Public Housing Agency, Architect, as appropriate to agenda topics for each meeting.
- D. Agenda:
 1. Review minutes of previous meetings.
 2. Review of Work progress.
 3. Field observations, problems, and decisions.
 4. Identification of problems that impede, or will impede, planned progress.
 5. Review of submittals schedule and status of submittals.
 6. Maintenance of progress schedule.
 7. Corrective measures to regain projected schedules.
 8. Planned progress during succeeding work period.
 9. Maintenance of quality and work standards.
 10. Effect of proposed changes on progress schedule and coordination.
 11. Other business relating to Work.
- E. Record minutes and distribute copies within three days after meeting to participants, with copies to Architect, Public Housing Agency, participants, and those affected by decisions made.

3.4 CONSTRUCTION PROGRESS SCHEDULE

- A. Within 7 days after date of the Agreement, submit preliminary schedule defining planned operations for the first 60 days of Work, with a general outline for remainder of Work.
- B. If preliminary schedule requires revision after review, submit revised schedule within 10 days.
- C. Within 20 days after review of preliminary schedule, submit draft of proposed complete schedule for review.
 1. Include written certification that major contractors have reviewed and accepted proposed schedule.
- D. Within 10 days after joint review, submit complete schedule.
- E. Submit updated schedule with each Application for Payment.

3.5 COORDINATION DRAWINGS

- A. Prepare coordination drawings to demonstrate how multiple trades will make use of confined spaces in order to properly execute the Work. The Contractor is responsible for coordinating the Work and preparing these coordination drawings.

3.6 SUBMITTALS FOR REVIEW

- A. Refer also to Section 01 3300 – Submittal Procedures
- B. When the following are specified in individual sections, submit them for review:
 1. Product data.

2. Shop drawings.
3. Samples for selection.
4. Samples for verification.
- C. Submit to Architect for review for the limited purpose of checking for conformance with information given and the design concept expressed in the contract documents.
- D. Samples will be reviewed only for aesthetic, color, or finish selection.
- E. After review, provide copies and distribute in accordance with Submittal Procedures article below and for record documents purposes described in Section 01 7800 - Closeout Submittals.

3.7 SUBMITTALS FOR INFORMATION

- A. When the following are specified in individual sections, submit them for information:
 1. Design data.
 2. Certificates.
 3. Test reports.
 4. Inspection reports.
 5. Manufacturer's instructions.
 6. Manufacturer's field reports.
- B. Submit for Architect's knowledge as contract administrator or for Public Housing Agency. No action will be taken.

3.8 SUBMITTALS FOR PROJECT CLOSEOUT

- A. When the following are specified in individual sections, submit them at project closeout:
 1. Project record documents.
 2. Operation and maintenance data.
 3. Warranties.
- B. Submit for Public Housing Agency's benefit during and after project completion.

3.9 SUBMITTAL PROCEDURES

- A. Transmit each submittal with a copy of approved submittal form in the electronic format described above.
- B. Sequentially number the transmittal forms. Revise submittals with original number and a sequential alphabetic suffix. Identify Project, Contractor, Subcontractor or supplier; pertinent drawing and detail number, and specification section number, as appropriate on each copy.
- C. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of Products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with the requirements of the Work and Contract Documents.
- D. Schedule submittals to expedite the Project, and coordinate submission of related items.
- E. For each submittal for review, allow 15 days excluding delivery time to and from the Contractor.
- F. Identify variations from Contract Documents and Product or system limitations that may be detrimental to successful performance of the completed Work.
- G. Provide space for Contractor and Architect reviewed stamps.
- H. When revised for resubmission, identify all changes made since previous submission.
- I. Distribute reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.
- J. Submittals not requested will not be recognized or processed.

END OF SECTION 01 3000

**SECTION 01 3100
PROJECT MANAGEMENT AND COORDINATION**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. General coordination procedures.
 - 2. Coordination drawings.
 - 3. RFIs.
 - 4. Digital project management procedures.
 - 5. Project meetings.
- B. Related Requirements:
 - 1. Section 01 7000 – Execution Requirements for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.

1.3 DEFINITIONS

- A. BIM: Building Information Modeling.
- B. RFI: Request for Information. Request from Owner, Architect, or Contractor seeking information required by or clarifications of the Contract Documents.

1.4 INFORMATIONAL SUBMITTALS

- A. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
 - 1. Name, address, telephone number, and email address of entity performing subcontract or supplying products.
 - 2. Number and title of related Specification Section(s) covered by subcontract.
 - 3. Drawing number and detail references, as appropriate, covered by subcontract.

1.5 GENERAL COORDINATION PROCEDURES

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations included in different Sections that depend on each other for proper installation, connection, and operation.
 - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 - 1. Preparation of Contractor's construction schedule.
 - 2. Preparation of the schedule of values.
 - 3. Installation and removal of temporary facilities and controls.
 - 4. Delivery and processing of submittals.
 - 5. Progress meetings.
 - 6. Preinstallation conferences.

7. Project closeout activities.
8. Startup and adjustment of systems.

1.6 COORDINATION DRAWINGS

- A. Coordination Drawings, General: Prepare coordination drawings according to requirements in individual Sections, and additionally where installation is not completely indicated on Shop Drawings, where limited space availability necessitates coordination, or if coordination is required to facilitate integration of products and materials fabricated or installed by more than one entity.
 1. Content: Project-specific information, drawn accurately to a scale large enough to indicate and resolve conflicts. Do not base coordination drawings on standard printed data. Include the following information, as applicable:
 - a. Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
 - b. Indicate dimensions shown on Drawings. Specifically note dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternative sketches to Architect indicating proposed resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.
- B. Coordination Drawing Organization: Organize coordination drawings as follows:
 1. Floor Plans and Reflected Ceiling Plans: Show architectural and structural elements, and mechanical, plumbing, fire-protection, fire-alarm, and electrical Work. Show locations of visible ceiling-mounted devices relative to acoustical ceiling grid. Supplement plan drawings with section drawings where required to adequately represent the Work.
 2. Plenum Space: Indicate sub framing for support of ceiling and wall systems, mechanical and electrical equipment, and related Work. Locate components within plenums to accommodate layout of light fixtures and other components indicated on Drawings. Indicate areas of conflict between light fixtures and other components.
 3. Mechanical Rooms: Provide coordination drawings for mechanical rooms showing plans and elevations of mechanical, plumbing, fire-protection, fire-alarm, and electrical equipment.
 4. Structural Penetrations: Indicate penetrations and openings required for all disciplines.
 5. Slab Edge and Embedded Items: Indicate slab edge locations and sizes and locations of embedded items for metal fabrications, sleeves, anchor bolts, bearing plates, angles, door floor closers, slab depressions for floor finishes, curbs and housekeeping pads, and similar items.
 6. Review: Architect will review coordination drawings to confirm that in general the Work is being coordinated, but not for the details of the coordination, which are Contractor's responsibility.

1.7 REQUEST FOR INFORMATION (RFI)

- A. General: Immediately on discovery of the need for additional information, clarification, or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.
 1. Architect will return without response those RFIs submitted to Architect by other entities controlled by Contractor.
 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:
 1. Project name.
 2. Project number.
 3. Date.
 4. Name of Contractor.
 5. Name of Architect.

6. RFI number, numbered sequentially.
 7. RFI subject.
 8. Specification Section number and title and related paragraphs, as appropriate.
 9. Drawing number and detail references, as appropriate.
 10. Field dimensions and conditions, as appropriate.
 11. Contractor's suggested resolution. If Contractor's suggested resolution impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
 12. Contractor's signature.
 13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
- C. RFI Forms: HUD form documents, or Software-generated form with substantially the same content as indicated above, acceptable to Architect.
- D. Architect's Action: Architect will review each RFI, determine action required, and respond. Allow seven working days for Architect's response for each RFI. RFIs received by Architect after 1:00 p.m. will be considered as received the following working day.
1. The following Contractor-generated RFIs will be returned without action:
 - a. Requests for approval of submittals.
 - b. Requests for approval of substitutions.
 - c. Requests for approval of Contractor's means and methods.
 - d. Requests for coordination information already indicated in the Contract Documents.
 - e. Requests for adjustments in the Contract Time or the Contract Sum.
 - f. Requests for interpretation of Architect's actions on submittals.
 - g. Incomplete RFIs or inaccurately prepared RFIs.
 2. Architect's action may include a request for additional information, in which case Architect's time for response will date from time of receipt by Architect of additional information.
 3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Section 01 2600 – Contract Modification Procedures.
 - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within 10 days of receipt of the RFI response.
- E. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly. Software log with not less than the following:
1. Project name.
 2. Name and address of Contractor.
 3. Name and address of Architect.
 4. RFI number including RFIs that were returned without action or withdrawn.
 5. RFI description.
 6. Date the RFI was submitted.
 7. Date Architect's response was received.
- F. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within seven days if Contractor disagrees with response.

1.8 DIGITAL PROJECT MANAGEMENT PROCEDURES

- A. Architect's Data Files Not Available: Architect will not provide Architect's CAD drawing digital data files for Contractor's use during construction.
- B. PDF Document Preparation: Where PDFs are required to be submitted to Architect, prepare as follows:
 1. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.

2. Name file with submittal number or other unique identifier, including revision identifier.
3. Certifications: Where digitally submitted certificates and certifications are required, provide a digital signature with digital certificate on where indicated.

1.9 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site unless otherwise indicated.
- B. Preconstruction Conference: Architect will schedule and conduct a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 15 days after execution of the Agreement.
 1. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 2. Agenda: Discuss items of significance that could affect progress, including the following:
 - a. Responsibilities and personnel assignments.
 - b. Tentative construction schedule.
 - c. Phasing.
 - d. Critical work sequencing and long lead items.
 - e. Designation of key personnel and their duties.
 - f. Lines of communications.
 - g. Use of web-based Project software.
 - h. Procedures for processing field decisions and Change Orders.
 - i. Procedures for RFIs.
 - j. Procedures for testing and inspecting.
 - k. Procedures for processing Applications for Payment.
 - l. Distribution of the Contract Documents.
 - m. Submittal procedures.
 - n. Sustainable design requirements.
 - o. Preparation of Record Documents.
 - p. Use of the premises.
 - q. Work restrictions.
 - r. Working hours.
 - s. Owner's occupancy requirements.
 - t. Responsibility for temporary facilities and controls.
 - u. Procedures for moisture and mold control.
 - v. Procedures for disruptions and shutdowns.
 - w. Construction waste management and recycling.
 - x. Parking availability.
 - y. Office, work, and storage areas.
 - z. Equipment deliveries and priorities.
 - aa. First aid.
 - bb. Security.
 - cc. Progress cleaning.
 3. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.
- C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity when required by other sections and when required for coordination with other construction.
 1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect of scheduled meeting dates.
 2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:

- a. Contract Documents.
 - b. Options.
 - c. Related RFIs.
 - d. Related Change Orders.
 - e. Purchases.
 - f. Deliveries.
 - g. Submittals.
 - h. Sustainable design requirements.
 - i. Review of mockups.
 - j. Possible conflicts.
 - k. Compatibility requirements.
 - l. Time schedules.
 - m. Weather limitations.
 - n. Manufacturer's written instructions.
 - o. Warranty requirements.
 - p. Compatibility of materials.
 - q. Acceptability of substrates.
 - r. Temporary facilities and controls.
 - s. Space and access limitations.
 - t. Regulations of authorities having jurisdiction.
 - u. Testing and inspecting requirements.
 - v. Installation procedures.
 - w. Coordination with other work.
 - x. Required performance results.
 - y. Protection of adjacent work.
 - z. Protection of construction and personnel.
- 3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
 - 4. Reporting: Distribute minutes of the meeting to each party present and to other parties requiring information.
 - 5. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.
- D. Progress Meetings: Conduct progress meetings at weekly intervals.
- 1. Coordinate dates of meetings with preparation of payment requests.
 - 2. Attendees: In addition to representatives of Owner and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 3. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 - 1) Review schedule for next period.
 - b. Review present and future needs of each entity present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Resolution of BIM component conflicts.
 - 4) Status of submittals.

- 5) Status of sustainable design documentation.
 - 6) Deliveries.
 - 7) Off-site fabrication.
 - 8) Access.
 - 9) Site use.
 - 10) Temporary facilities and controls.
 - 11) Progress cleaning.
 - 12) Quality and work standards.
 - 13) Status of correction of deficient items.
 - 14) Field observations.
 - 15) Status of RFIs.
 - 16) Status of Proposal Requests.
 - 17) Pending changes.
 - 18) Status of Change Orders.
 - 19) Pending claims and disputes.
 - 20) Documentation of information for payment requests.
4. Minutes: Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.
- a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 3100

**SECTION 01 3216
CONSTRUCTION PROGRESS SCHEDULE**

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Construction progress schedule.

1.2 RELATED SECTIONS

- A. Section 01 3000 - Administrative Requirements.

1.3 SUBMITTALS

- A. Within five (5) days after date of the Agreement, submit preliminary schedule defining planned operations for the first 60 days of Work, with a general outline for remainder of Work.
- B. If preliminary schedule requires revision after review, submit revised schedule within five (5) days.
- C. Within ten (10) days after review of preliminary schedule, submit draft of proposed complete schedule for review.
 - 1. Include written certification that major contractors have reviewed and accepted proposed schedule.
- D. Within 10 days after joint review, submit complete schedule.
- E. Submit updated schedule with each Application for Payment or as required.

1.4 SCHEDULE FORMAT

- A. Listings: In chronological order according to the start date for each activity. Identify each activity with the applicable specification section number.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.1 CONTENT

- A. Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction.
- B. Identify each item by specification section number.
- C. Identify work of separate stages and other logically grouped activities.
- D. Provide sub-schedules to define critical portions of the entire schedule.
- E. Show accumulated percentage of completion of each item, and total percentage of Work completed, as of the first day of each month.
- F. Provide legend for symbols and abbreviations used.

3.2 BAR CHARTS

- A. Include a separate bar for each major portion of Work or operation.
- B. Identify the first work day of each week.

3.3 REVIEW AND EVALUATION OF SCHEDULE

- A. Participate in joint review and evaluation of schedule with Architect at each submittal.
- B. Evaluate project status to determine work behind schedule and work ahead of schedule.
- C. After review, revise as necessary as result of review, and resubmit within 10 days.

3.4 UPDATING SCHEDULE

- A. Maintain schedules to record actual start and finish dates of completed activities.
- B. Indicate progress of each activity to date of revision, with projected completion date of each activity.
- C. Annotate diagrams to graphically depict current status of Work.
- D. Identify activities modified since previous submittal, major changes in Work, and other identifiable changes.
- E. Indicate changes required to maintain Date of Substantial Completion.

- F. Submit reports required to support recommended changes.
- G. Provide narrative report to define problem areas, anticipated delays, and impact on the schedule. Report corrective action taken or proposed and its effect including the effects of changes on schedules of separate contractors.

3.5 DISTRIBUTION OF SCHEDULE

- A. Distribute electronic copies of updated schedules to Architect, Owner, and other concerned parties.
- B. Instruct recipients to promptly report, in writing, problems anticipated by projections shown in schedules.

END OF SECTION 01 3216

**SECTION 01 3300
SUBMITTAL PROCEDURES**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Submittal schedule requirements.
 - 2. Administrative and procedural requirements for submittals.

1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Architect's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."
- B. Informational Submittals: Written and graphic information and physical samples that do not require Architect's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."

1.3 SUBMITTAL SCHEDULE

- A. Submittal Schedule: Submit, as an action submittal, a list of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect and additional time for handling and reviewing submittals required by those corrections.
 - 1. Coordinate submittal schedule with list of subcontracts, the schedule of values, and Contractor's construction schedule.
 - 2. Initial Submittal: Submit concurrently with startup construction schedule. Include submittals required during the first 60 days of construction. List those submittals required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.
 - 3. Final Submittal: Submit concurrently with the first complete submittal of Contractor's construction schedule.
 - a. Submit revised submittal schedule to reflect changes in current status and timing for submittals.
 - 4. Format: Arrange the following information in a tabular format:
 - a. Scheduled date for first submittal.
 - b. Specification Section number and title.
 - c. Submittal Category: Action; informational.
 - d. Name of subcontractor.
 - e. Description of the Work covered.
 - f. Scheduled date for Architect's final release or approval.
 - g. Scheduled dates for purchasing.
 - h. Scheduled date of fabrication.
 - i. Scheduled dates for installation.
 - j. Activity or event number.

1.4 SUBMITTAL FORMATS

- A. Submittal Information: Include the following information in each submittal:
 - 1. Project name.
 - 2. Date.
 - 3. Name of Architect.
 - 4. Name of Construction Manager.
 - 5. Name of Contractor.
 - 6. Name of firm or entity that prepared submittal.
 - 7. Names of subcontractor, manufacturer, and supplier.

8. Unique submittal number, including revision identifier. Include Specification Section number with sequential alphanumeric identifier; and alphanumeric suffix for resubmittals.
 9. Category and type of submittal.
 10. Submittal purpose and description.
 11. Number and title of Specification Section, with paragraph number and generic name for each of multiple items.
 12. Drawing number and detail references, as appropriate.
 13. Indication of full or partial submittal.
 14. Location(s) where product is to be installed, as appropriate.
 15. Other necessary identification.
 16. Remarks.
 17. Signature of transmitter.
- B. Options: Identify options requiring selection by Architect.
- C. Deviations and Additional Information: On each submittal, clearly indicate deviations from requirements in the Contract Documents, including minor variations and limitations; include relevant additional information and revisions, other than those requested by Architect previous submittals. Indicate by highlighting on each submittal or noting on attached separate sheet.
- D. Paper Submittals:
1. Place a permanent label or title block on each submittal item for identification; include name of firm or entity that prepared submittal.
 2. Provide a space approximately **6 by 8 inches** on label or beside title block to record Contractor's review and approval markings and action taken by Architect.
 3. Action Submittals: Submit digital copies of each submittal unless otherwise indicated.
 4. Informational Submittals: Submit digital copies of each submittal unless otherwise indicated.
 5. Transmittal for Submittals: Assemble each submittal individually and appropriately for transmittal and handling.
- E. PDF Submittals: Prepare submittals as PDF package, incorporating complete information into each PDF file. Name PDF file with submittal number.

1.5 SUBMITTAL PROCEDURES

- A. Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.
1. Email: Prepare submittals as PDF package, and transmit to Architect by sending via email. Include PDF transmittal form. Include information in email subject line as requested by Architect.
 2. Web-Based Project Software: Prepare submittals in PDF form, and upload to web-based Project software website. Enter required data in web-based software site to fully identify submittal.
 3. Paper: Prepare submittals in paper form, and deliver to Architect.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
 3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
- C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.

2. Resubmittal Review: Allow 15 days for review of each resubmittal.
- D. Resubmittals: Make resubmittals in same form as initial submittal.
- E. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- F. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Architect's action stamp.

1.6 SUBMITTAL REQUIREMENTS

- A. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
 1. If information must be specially prepared for submittal because standard published data are unsuitable for use, submit as Shop Drawings, not as Product Data.
 2. Mark each copy of each submittal to show which products and options are applicable.
 3. Include the following information, as applicable:
 - a. Manufacturer's catalog cuts.
 - b. Manufacturer's product specifications.
 - c. Standard color charts.
 - d. Statement of compliance with specified referenced standards.
 - e. Testing by recognized testing agency.
 - f. Application of testing agency labels and seals.
 - g. Notation of coordination requirements.
 - h. Availability and delivery time information.
 4. For equipment, include the following in addition to the above, as applicable:
 - a. Wiring diagrams that show factory-installed wiring.
 - b. Printed performance curves.
 - c. Operational range diagrams.
 - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
 5. Submit Product Data before Shop Drawings, and before or concurrent with Samples.
- B. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data unless submittal based on Architect's digital data drawing files is otherwise permitted.
 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Identification of products.
 - b. Schedules.
 - c. Compliance with specified standards.
 - d. Notation of coordination requirements.
 - e. Notation of dimensions established by field measurement.
 - f. Relationship and attachment to adjoining construction clearly indicated.
 - g. Seal and signature of professional engineer if specified.
 2. Paper Sheet Size: Except for templates, patterns, and similar full-size Drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 30 by 42 inches.
 - a. PDFs preferred: But if hardcopies necessary, then **two** (bond) copies of each submittal. Architect will return **one** copy.
- C. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other materials.
 1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
 2. Identification: Permanently attach label on unexposed side of Samples that includes the following:
 - a. Project name and submittal number.
 - b. Generic description of Sample.
 - c. Product name and name of manufacturer.

- d. Sample source.
 - e. Number and title of applicable Specification Section.
 - f. Specification paragraph number and generic name of each item.
3. Email Transmittal: Provide PDF transmittal. Include digital image file illustrating Sample characteristics, and identification information for record.
 4. Paper Transmittal: Include paper transmittal including complete submittal information indicated.
 5. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
 - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
 - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
 6. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
 - a. Number of Samples: Submit **one** full set of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return submittal with options selected.
 7. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
 - a. Number of Samples: Submit two sets of Samples. Architect will retain one Sample set; other will be returned.
 - 1) Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
 - 2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least two sets of paired units that show approximate limits of variations.
- D. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
- E. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.
- F. Design Data: Prepare and submit written and graphic information indicating compliance with indicated performance and design criteria in individual Specification Sections. Include list of assumptions and summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Number each page of submittal.
- G. Certificates:
1. Certificates and Certifications Submittals: Submit a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity. Provide a notarized signature where indicated.
 2. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.

3. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
 4. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
 5. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
 6. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on AWS forms. Include names of firms and personnel certified.
- H. Test and Research Reports:
1. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
 2. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
 3. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
 4. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
 5. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
 6. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
 - a. Name of evaluation organization.
 - b. Date of evaluation.
 - c. Time period when report is in effect.
 - d. Product and manufacturers' names.
 - e. Description of product.
 - f. Test procedures and results.
 - g. Limitations of use.

1.7 DELEGATED-DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
 1. If criteria indicated are insufficient to perform services or certification required, submit a written request for additional information to Architect.
- B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally signed PDF file copy of certificate, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
 1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

1.8 CONTRACTOR'S REVIEW

- A. Action Submittals and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
- B. Contractor's Approval: Indicate Contractor's approval for each submittal with a uniform approval stamp. Include name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.
 - 1. Architect will not review submittals received from Contractor that do not have Contractor's review and approval.

1.9 ARCHITECT'S REVIEW

- A. Action Submittals: Architect will review each submittal, indicate corrections or revisions required, and return it.
 - 1. PDF Submittals: Architect will indicate, via markup on each submittal, the appropriate action.
 - 2. Paper Submittals: Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.
- B. Informational Submittals: Architect will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.
- C. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Architect.
- D. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.
- E. Architect will discard submittals received from sources other than Contractor.
- F. Submittals not required by the Contract Documents will be returned by Architect without action.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION 01 3300

**SECTION 01 4000
QUALITY REQUIREMENTS**

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Quality assurance submittals.
- B. Mock-ups.
- C. Control of installation.
- D. Tolerances.
- E. Testing and inspection services.
- F. Manufacturers' field services.

1.2 SUMMARY

- A. Section includes quality assurance and quality control services to be provided by the Contractor under the terms of the Contract. Refer to Definitions Article below for definitions of the terms used herein.
 - 1. Quality assurance services include but are not limited to the following:
 - a. Qualification of sources, manufacturers, fabricators, support service providers, testing and inspection agencies and installers.
 - b. Pre-construction testing procedures specified to be the Contractor's responsibility.
 - c. Delegated design proposals.
 - d. Representative construction assemblies, activities, or processes.
 - e. Field measurements and surveys.
 - f. Evaluation of project conditions and corrective measures.
 - g. Manufacturer construction process monitoring.
 - h. Construction documentation.
 - 2. Quality control services include but are not limited to the following:
 - a. Post-installation quality control testing.
 - b. Inspection of installed work.
 - c. Scheduling required inspections.
 - d. Scheduling inspections for special project warranties.
 - e. Correction of deficient or defective work.
 - f. Re-testing following correction of deficient or defective work.

1.3 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and ensure that proposed construction complies with the Contract Documents.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to verify that completed construction complies with the Contract Documents. Services do not include contract administration activities performed by Architect or Construction Manager.
- C. Representative Construction Assemblies, Activities, or Processes: Physical assemblies, demonstrations, or exercises to illustrate finishes, show interrelationships of materials, or demonstrate critical construction processes to establish the standard by which the Work will be judged or compared, including the following:
 - 1. Mock-ups: Representative assemblies of dissimilar materials to verify the Contractor's understanding of the work of the Contract.
 - 2. Field Samples: Application of finish materials to verify the applicator's skill in performing the work.
 - 3. Field Demonstrations: Demonstration of a construction process or a portion thereof to verify the Contractor's understanding of the Work of the Contract.
- D. Qualified Testing Agency: An entity with the experience and capability to conduct the specified testing and inspecting procedures, as documented by ASTM E 548, and that specializes in types of tests and inspections to be performed.

- E. Qualified Professional Engineer: A licensed professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated.
- F. Qualified Factory-Authorized Service Representative: An authorized representative who is trained and approved by a specified manufacturer to inspect and service the manufacturer's installed products.
- G. Qualified Fabricator: A firm experienced in fabricating products of the design indicated to those indicated for this Project and with sufficient production capacity to produce required units in accordance with the Contract Documents and the Project Schedule.
- H. If more detailed requirements are needed, add this information to specific individual Sections. Examples include Installer employing workers trained and approved by manufacturer, Installer being acceptable to manufacturer, and Installer being an authorized representative of manufacturer for both installation and maintenance.
- I. Qualified Material Supplier: A firm with documented capability to produce specified materials of sufficient quality and quantity to service the Project in compliance with the Contract Documents and the Project Schedule.
- J. Qualified Manufacturer: A firm experienced in manufacturing the specified products or systems and with sufficient resources to produce specified products or systems in accordance with the Contract Documents and the Project Schedule.
- K. Qualified Product Distributor: A firm authorized by the specified product manufacturer to distribute the product in the Project vicinity and having sufficient product or material inventory access, service personnel, and distribution resources to adequately service the Project in accordance with the Contract Documents and the Project Schedule.
- L. Qualified Construction Support Service Provider: A firm with sufficient labor, equipment, and/or supply resources to provide construction-related services in sufficient quantity and quality to comply with the Contract Documents and Project Schedule.
- M. Qualified Installer: A firm or individual experienced in installing, erecting, or assembling work for this Project in compliance with the Contract Documents and the Project Schedule.
- N. Retain paragraph and subparagraph below if other Specification Sections assign certain items of work to preselected contractors (specialists). Revise to suit Project. See Evaluations about naming parties other than Public Housing Agency and Contractor in Specifications.
- O. Qualified Specialists: A firm or individual with documented qualifications to perform certain critical construction activities in accordance with the Contract Documents and the Project Schedule. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
 - 1. Requirement for specialists shall not supersede building codes and similar regulations governing the Work, nor interfere with local trade-union jurisdictional settlements and similar conventions.

1.4 CONTRACT DOCUMENTS, AND THEIR INTENT

- A. The intent of the contract documents is to include all items necessary for the proper execution and completion of the work by the contractor(s).
- B. The contract documents are complementary, and what is required by one shall be as binding as if required by all.
- C. The contractor shall provide all labor and materials necessary for the entire completion of the work or system as described in the contract documents and reasonably inferable to produce the intended results.
- D. In the event of inconsistencies within or between the contract documents, the contractor shall provide the better quality or greater quantity or work, and shall comply with the stricter requirements.

1.5 RELATED REQUIREMENTS

- A. Section 01 4219 – Reference Standards.
- B. Section 01 7000 – Execution and Closeout Requirements.

1.6 SUBMITTALS

- A. Design Data: Submit for Architect's knowledge as contract administrator for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents, or for Public Housing Agency's information.
- B. Test Reports: After each test/inspection, promptly submit two copies of report to Architect and to Contractor.
 - 1. Include:
 - a. Date issued.
 - b. Project title and number.
 - c. Name of inspector.
 - d. Date and time of sampling or inspection.
 - e. Identification of product and specifications section.
 - f. Location in the Project.
 - g. Type of test/inspection.
 - h. Date of test/inspection.
 - i. Results of test/inspection.
 - j. Conformance with Contract Documents.
 - k. When requested by Architect, provide interpretation of results.
 - 2. Test report submittals are for Architect's knowledge as contract administrator for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents, or for Public Housing Agency's information.
- C. Certificates: When specified in individual specification sections, submit certification by the manufacturer and Contractor or installation/application subcontractor to Architect, in quantities specified for Product Data.
 - 1. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
 - 2. Certificates may be recent or previous test results on material or product, but must be acceptable to Architect.
- D. Manufacturer's Instructions: When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, for the Public Housing Agency's information. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.
- E. Manufacturer's Field Reports: Submit reports for Architect's benefit as contract administrator or for Public Housing Agency.
 - 1. Submit report in duplicate within 30 days of observation to Architect for information.
 - 2. Submit for information for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents.
- F. Erection Drawings: Submit drawings for Architect's benefit as contract administrator or for Public Housing Agency.
 - 1. Submit for information for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents.
 - 2. Data indicating inappropriate or unacceptable Work may be subject to action by Architect or Public Housing Agency.

1.7 REFERENCES AND STANDARDS - SEE SECTION 01 4219

1.8 TESTING AND INSPECTION AGENCIES

- A. Public Housing Agency will employ and pay for services of an independent testing agency to perform other specified testing if necessary.
- B. Employment of agency in no way relieves Contractor of obligation to perform Work in accordance with requirements of Contract Documents.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.1 CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.
- D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Have Work performed by persons qualified to produce required and specified quality.
- F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

3.2 MOCK-UPS

- A. Tests will be performed under provisions identified in this section and identified in the respective product specification sections.
- B. Assemble and erect specified items with specified attachment and anchorage devices, flashings, seals, and finishes.
- C. Accepted mock-ups shall be a comparison standard for the remaining Work.
- D. Where mock-up has been accepted by Architect and is specified in product specification sections to be removed, remove mock-up and clear area when directed to do so.

3.3 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Architect before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

3.4 TESTING AND INSPECTION

- A. See individual specification sections for testing required.
- B. Testing Agency Duties:
 - 1. Provide qualified personnel at site. Cooperate with Architect and Contractor in performance of services.
 - 2. Perform specified sampling and testing of products in accordance with specified standards.
 - 3. Ascertain compliance of materials and mixes with requirements of Contract Documents.
 - 4. Promptly notify Architect and Contractor of observed irregularities or non-conformance of Work or products.
 - 5. Perform additional tests and inspections required by Architect.
 - 6. Submit reports of all tests/inspections specified.
- C. Limits on Testing/Inspection Agency Authority:
 - 1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
 - 2. Agency may not approve or accept any portion of the Work.
 - 3. Agency may not assume any duties of Contractor.
 - 4. Agency has no authority to stop the Work.
- D. Contractor Responsibilities:
 - 1. Deliver to agency at designated location, adequate samples of materials proposed to be used that require testing, along with proposed mix designs.
 - 2. Cooperate with laboratory personnel, and provide access to the Work and to manufacturers' facilities.

3. Provide incidental labor and facilities:
 - a. To provide access to Work to be tested/inspected.
 - b. To obtain and handle samples at the site or at source of Products to be tested/inspected.
 - c. To facilitate tests/inspections.
 - d. To provide storage and curing of test samples.
4. Notify Architect and laboratory 24 hours prior to expected time for operations requiring testing/inspection services.
5. Employ services of an independent qualified testing laboratory and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
6. Arrange with Public Housing Agency's agency and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
- E. Re-testing required because of non-conformance to specified requirements shall be performed by the same agency on instructions by Architect.
- F. Re-testing required because of non-conformance to specified requirements shall be paid for by Contractor.

3.5 MANUFACTURERS' FIELD SERVICES

- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust and balance of equipment as applicable, and to initiate instructions when necessary.
- B. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

3.6 DEFECT ASSESSMENT

- A. Repair visual defects to the satisfaction of the Architect and Public Housing Agency. If repairs cannot be made satisfactorily, replace items so designated.
- B. Replace Work or portions of the Work not conforming to specified requirements.
- C. If, in the opinion of Architect, it is not practical to remove and replace the Work, Architect will direct an appropriate remedy or adjust payment.

END OF SECTION 01 4000

**SECTION 01 4100
REGULATORY REQUIREMENTS**

PART 1 - GENERAL

1.1 SUMMARY

- A. 28 CFR 35 - Department of Justice accessibility regulations relating to State and local governments; current edition.
- B. 28 CFR 36 - Department of Justice accessibility regulations relating to public accommodations; current edition.
- C. 49 CFR 27, 37, and 38 - Transportation for Individuals with Disabilities; Final Rule; Department of Transportation; current edition.
- D. ANSI A117.1 (2009), Standard for Accessible and Usable Buildings and Facilities as mandated by law and incorporated by reference by the States and Municipalities, including Ohio in the Ohio Administrative Code 4401:8-44-01
- E. 29 CFR 1910 - Occupational Safety and Health Standards; current edition.

1.2 RELATED REQUIREMENTS

- A. Section 01 4000 - Quality Requirements.

1.3 QUALITY ASSURANCE

- A. Designer Qualifications: Where delegated engineering design is to be performed under the construction contract provide the direct supervision of a Professional Engineer experienced in design of this type of work and licensed in the State in which the Project is located.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION 01 4100

**SECTION 01 4126
PERMIT REQUIREMENTS**

PART 1 - GENERAL

1.1 SUMMARY

- A. The Contractor is responsible for obtaining and paying for permits, licenses, and other local requirements for constructing the Project.
- B. Commercial building permits will be issued by the Mahoning County Building Department by address.

1.2 SUBMITTALS

- A. For the Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION 01 4126

**SECTION 01 4216
DEFINITIONS**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative requirements for definitions. Refer to Divisions 02 through 32 for specific references.

1.2 DEFINITIONS

- A. General: Basic contract definitions are included in the Conditions of the Contract.
- B. **"Indicated"**: The term "indicated" refers to graphic representations, notes, or schedules on the Drawings; or to other paragraphs or schedules in the Specifications and similar requirements in the Contract Documents. Terms such as "shown," "noted," "scheduled," and "specified" are used to help the user locate the reference. Location is not limited.
- C. **"Directed"**: Terms such as "directed," "requested," "authorized," "selected," "approved," "required," and "permitted" mean directed by the Architect, requested by the Architect, and similar phrases.
- D. **"Approved"**: The term "approved," when used in conjunction with the Architect's action on the General Construction's submittals, applications, and requests, is limited to the Architect's duties and responsibilities as stated in the Conditions of the Contract.
- E. **"Regulations"**: The term "regulations" includes laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. **"Furnish"**: The term "furnish" means to supply and deliver to the Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. **"Install"**: The term "install" describes operations at the Project site including the actual unloading, temporary storage, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- H. **"Provide"**: The term "provide" means to furnish and install, complete and ready for the intended use.
- I. **"Installer"**: An installer is the Contractor or another entity engaged by the Contractor, either as an employee, subcontractor, or contractor of lower tier, to perform a particular construction activity, including installation, erection, application, or similar operations. Installers are required to be experienced in the operations they are engaged to perform.
 - 1. The term "experienced," when used with the term "installer," means having successfully completed a minimum of five previous projects similar in size and scope to this Project; being familiar with the special requirements indicated; and having complied with requirements of authorities having jurisdiction.
 - 2. Trades: Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to tradespersons of the corresponding generic name.
 - 3. Assigning Specialists: Certain Sections of the Specifications require that specific construction activities shall be performed by specialists who are recognized experts in those operations. The specialists must be engaged for those activities, and their assignments are requirements over which the Contractor has no option. However, the ultimate responsibility for fulfilling contract requirements remains with the Contractor.
 - a. This requirement shall not be interpreted to conflict with enforcing building codes and similar regulations governing the Work. It is also not intended to interfere with local trade-union jurisdictional settlements and similar conventions.
- J. Product-Related Definitions:
 - 1. **"Products"** are items purchased for incorporation in the Work, whether purchased for the Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.

2. **"Materials"** are products substantially shaped, cut, worked, mixed, finished, refined or otherwise fabricated, processed, or installed to form a part of the Work.
 3. **"Equipment"** is a product with operational parts, whether motorized or manually operated, that requires service connections, such as wiring or piping.
 4. **"Systems"** are sets of complementary materials or products arranged or combined by a manufacturing concern so as to form a unity or whole for fulfilling a specific building (or site) function.
 5. **"Damage"** shall mean a substandard or impaired condition of a product, including breakage, surface blemishes, abrasion, caused by weather exposure, accident, abuse, aging, mis-handling, storage, shipping, or other causes.
 6. A **"Substitution"** is a product not specified and which substantially deviates from the specified requirements.
- K. **"Project site"** is the space available to the Contractor for performing construction activities, either exclusively or in conjunction with others performing other work as part of the Project. The extent of the Project site is shown on the Drawings and may or may not be identical with the description of the land on which the Project is to be built.
- L. **"Testing Agencies"**: A testing agency is an independent entity engaged to perform specific inspections or tests, either at the Project site or elsewhere, and to report on and, if required, to interpret results of those inspections or tests.

1.3 SPECIFICATION FORMAT AND CONTENT EXPLANATION

- A. Specification Format: These Specifications are organized into Divisions and Sections based on the 50-division format and CSI/CSC's "MasterFormat" numbering system.
- B. Specification Content: These Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be interpolated as the sense requires. Singular words shall be interpreted as plural and plural words interpreted as singular where applicable as the context of the Contract Documents indicates.
 2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by the Contractor. At certain locations in the Section Text, subjective language is used for clarity to describe responsibilities that must be fulfilled indirectly by the Contractor or by others when so noted.
 - a. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION 01 4216

**SECTION 01 4219
REFERENCE STANDARDS**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative requirements for references. Refer to Divisions 2 through 33 for specific references.

1.2 INDUSTRY STANDARDS

- A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
- B. Publication Dates: Comply with standards in effect as of the date of the Contract Documents.
- C. Copies of Standards: Each entity engaged in construction on the Project must be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
- D. Where copies of standards are needed to perform a required construction activity, the Contractor shall obtain copies directly from the publication source and make them available on request.
- E. Abbreviations and Names: Trade association names and titles of general standards are frequently abbreviated. Where abbreviations and acronyms are used in the Specifications or other Contract Documents, they mean the recognized name of the trade association, standards-producing organization, authorities having jurisdiction, or other entity applicable to the context of the text provision. Refer to Gale Research's "Encyclopedia of Associations" or Columbia Books' "National Trade & Professional Associations of the U.S.," which are available in most libraries.

1.3 SUBMITTALS

- A. Permits, Licenses, and Certificates: For the Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION 01 4219

**SECTION 01 5000
TEMPORARY FACILITIES AND CONTROLS**

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Provisions for use of existing building services, including electrical power and water.
- B. Temporary Controls: Barriers and enclosures.
- C. Security requirements.
- D. Vehicular access and parking.
- E. Waste removal facilities and services.
- F. Provisions for field office.

1.2 SUBMITTALS

- A. Prior to commencement of Work on site, each Contractor shall submit a site plan identifying location of temporary barriers and other facilities and controls for protecting the public and existing facilities and operations. Include descriptions of assemblies including but not limited to protection of existing building structures, sidewalks and landscaping, building entrances, equipment and other existing conditions that require protection. The Public Housing Agency will review the submitted plans. Contractors shall respond to any adjustments requested or recommended by the Public Housing Agency.

1.3 EXISTING BUILDING SERVICES

- A. The Public Housing Agency will allow use of existing building electrical power and water for construction purposes, provided that such use does not disrupt or otherwise adversely affect the ordinary building operations. The Contractor shall evaluate the capacity of existing services and supplement them as required.

1.4 TEMPORARY SANITARY FACILITIES

- A. Contractor shall provide temporary toilets for use by all job site personnel.

1.5 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public, to allow for Public Housing Agency's use of site and to protect existing facilities and adjacent properties from damage from construction operations.
- B. Provide barricades and covered walkways required by governing authorities for public rights-of-way and for public access to existing building.
- C. Provide protection for plants designated to remain. Replace damaged plants.
- D. Protect vehicular traffic, stored materials, site, and structures from damage.

1.6 SECURITY

- A. Provide security and facilities to protect Work, and Public Housing Agency's operations from unauthorized entry, vandalism, or theft.

1.7 VEHICULAR ACCESS AND PARKING

- A. Comply with regulations relating to use of streets and sidewalks, access to emergency facilities, and access for emergency vehicles.
- B. Coordinate access and haul routes with governing authorities.
- C. Provide and maintain access to fire hydrants, free of obstructions.
- D. Park only in areas approved by the Public Housing Agency.

1.8 WASTE REMOVAL

- A. Provide waste removal facilities and services as required to maintain the site in clean and orderly condition.

- B. Provide containers with lids. Locate containers agreed upon by the Public Housing Agency. Remove trash from site periodically.
- C. If materials to be recycled or re-used on the project must be stored on-site, provide suitable non-combustible containers; locate containers holding flammable material outside the structure unless otherwise approved by the authorities having jurisdiction.
- D. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.

1.9 FIELD OFFICES

- A. The Public Housing Agency will designate a space in the building or nearby for meetings and general administration activities or the contractor may provide a job trailer.

1.10 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, materials, prior to Substantial Completion inspection.
- B. Clean and repair damage caused by installation or use of temporary work.
- C. Restore existing facilities used during construction to original condition. Restore new permanent facilities used during construction to specified condition.

PART 2 PRODUCTS

2.1 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

PART 3 EXECUTION

3.1 TEMPORARY FACILITIES, GENERAL

- A. Conservation: Coordinate construction and use of temporary facilities with consideration given to conservation of energy, water, and materials. Coordinate use of temporary utilities to minimize waste.
 - 1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work. See other Sections for disposition of salvaged materials that are designated as Owner's property.

3.2 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.3 TEMPORARY UTILITY INSTALLATION

- A. General: Install temporary service or connect to existing service.
 - 1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Sewers and Drainage: Provide temporary utilities to remove effluent lawfully.
 - 1. Connect temporary sewers to municipal system as directed by authorities having jurisdiction.
- C. Water Service: Install water service and distribution piping in sizes and pressures adequate for construction.
- D. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
- E. Isolation of Work Areas in Occupied Facilities: Prevent dust, fumes, and odors from entering occupied areas.
- F. Electric Power Service: Provide electric power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations.

1. Install electric power service overhead unless otherwise indicated.
- G. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.
 1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.
 1. Where access to adjacent properties is required in order to affect protection of existing facilities, obtain written permission from adjacent property owner to access property for that purpose.
- B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- C. Temporary Erosion and Sedimentation Control: Comply with requirements of EPA Construction General Permit or authorities having jurisdiction, whichever is more stringent.
- D. Temporary Erosion and Sedimentation Control: Provide measures to prevent soil erosion and discharge of soil-bearing water runoff and airborne dust to undisturbed areas and to adjacent properties and walkways, according to requirements of EPA Construction General Permit or authorities having jurisdiction, whichever is more stringent.
 1. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross tree- or plant-protection zones.
 2. Inspect, repair, and maintain erosion- and sedimentation-control measures during construction until permanent vegetation has been established.
 3. Clean, repair, and restore adjoining properties and roads affected by erosion and sedimentation from Project site during the course of Project.
 4. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.
- E. Stormwater Control: Comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.
- F. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.
- G. Site Enclosure Fence: Before construction operations begin furnish and install site enclosure fence in a manner that will prevent people from easily entering site except by entrance gates.
 1. Extent of Fence: As required to enclose entire Project site or portion determined sufficient to accommodate construction operations.
 2. Maintain security by limiting number of keys and restricting distribution to authorized personnel. Furnish one set of keys to Owner.
- H. Security Enclosure and Lockup: Install temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. Lock entrances at end of each workday.
- I. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- J. Temporary Egress: Maintain temporary egress from existing occupied facilities as indicated and as required by authorities having jurisdiction.

3.5 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.

- C. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
1. Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.
 2. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period.

END OF SECTION 01 5000

**SECTION 01 6000
PRODUCT REQUIREMENTS**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.
- B. Related Requirements:
 - 1. Section 01 2500 "Substitution Procedures" for requests for substitutions.

1.2 DEFINITIONS

- A. Products: Items obtained for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature that is current as of date of the Contract Documents.
 - 2. New Products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
 - 3. Comparable Product: Product that is demonstrated and approved by Architect through submittal process to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
- B. Basis-of-Design Product Specification: A specification in which a single manufacturer's product is named and accompanied by the words "basis-of-design product," including make or model number or other designation. In addition to the basis-of-design product description, product attributes and characteristics may be listed to establish the significant qualities related to type, function, in-service performance and physical properties, weight, dimension, durability, visual characteristics, and other special features and requirements for purposes of evaluating comparable products of additional manufacturers named in the specification.

1.3 ACTION SUBMITTALS

- A. Comparable Product Request Submittal: Submit request for consideration of each comparable product. Identify basis-of-design product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Include data to indicate compliance with the requirements specified in "Comparable Products" Article.
 - 2. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within seven (7) days of receipt of a comparable product request. Architect will notify Contractor of approval or rejection of proposed comparable product request within (15) days of receipt of request, or seven (7) days of receipt of additional information or documentation, whichever is later.
 - a. Form of Architect's Approval of Submittal: As specified in Section 01 3300 – Submittal Procedures.
 - b. Use product specified if Architect does not issue a decision on use of a comparable product request within time allocated.
- B. Basis-of-Design Product Specification Submittal: Comply with requirements in Section 01 3300 – Submittal Procedures. Show compliance with requirements.

1.4 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, select product compatible with products previously selected, even if previously selected products were also options.

1.5 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.
- B. Delivery and Handling:
 - 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
 - 2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
 - 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 - 4. Inspect products on delivery to determine compliance with the Contract Documents and to determine that products are undamaged and properly protected.
- C. Storage:
 - 1. Store products to allow for inspection and measurement of quantity or counting of units.
 - 2. Store materials in a manner that will not endanger Project structure.
 - 3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
 - 4. Protect foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
 - 5. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
 - 6. Protect stored products from damage and liquids from freezing.

1.6 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
 - 1. **Manufacturer's Warranty:** Written warranty furnished by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
 - 2. **Special Warranty:** Written warranty required by the Contract Documents to provide specific rights for Owner.
- B. **Special Warranties:** Prepare a written document that contains appropriate terms and identification, ready for execution.
 - 1. **Manufacturer's Standard Form:** Modified to include Project-specific information and properly executed.
 - 2. **Specified Form:** When specified forms are included with the Specifications, prepare a written document using indicated form properly executed.
 - 3. See other Sections for specific content requirements and particular requirements for submitting special warranties.

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. **General Product Requirements:** Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.
 - 1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 - 2. **Standard Products:** If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 - 3. Owner reserves the right to limit selection to products with warranties meeting requirements of the Contract Documents.

4. Where products are accompanied by the term "as selected," Architect will make selection.
 5. Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.
- B. Product Selection Procedures:
1. Sole Product: Where Specifications name a single manufacturer and product, provide the named product that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
 - a. Sole product may be indicated by the phrase: "Subject to compliance with requirements, provide the following: ..."
 2. Sole Manufacturer / Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
 - a. Sole Manufacturer / Source may be indicated by the phrase: "Subject to compliance with requirements, provide products by the following: ..."
 3. Limited List of Products: Where Specifications include a list of names of both manufacturers and products, provide one of the products listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered unless otherwise indicated.
 - a. Limited list of products may be indicated by the phrase: "Subject to compliance with requirements, provide one of the following: ..."
 4. Non-Limited List of Products: Where Specifications include a list of names of both available manufacturers and products, provide one of the products listed, or an unnamed product, which complies with requirements.
 - a. Non-limited list of products is indicated by the phrase: "Subject to compliance with requirements, available products that may be incorporated in the Work include, but are not limited to, the following: ..."
 5. Limited List of Manufacturers: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered unless otherwise indicated.
 - a. Limited list of manufacturers is indicated by the phrase: "Subject to compliance with requirements, provide products by one of the following: ..."
 6. Non-Limited List of Manufacturers: Where Specifications include a list of available manufacturers, provide a product by one of the manufacturers listed, or a product by an unnamed manufacturer, which complies with requirements.
 - a. Non-limited list of manufacturers is indicated by the phrase: "Subject to compliance with requirements, available manufacturers whose products may be incorporated in the Work include, but are not limited to, the following: ..."
 7. Basis-of-Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product by one of the other named manufacturers.
 - a. For approval of products by unnamed manufacturers, comply with requirements in Section 01 2500 – Substitution Procedures, for substitutions for convenience.
- C. Visual Matching Specification: Where Specifications require "match Architect's sample," provide a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches.
1. If no product available within specified category matches and complies with other specified requirements, comply with requirements in Section 01 2500 – Substitution Procedures, for proposal of product.
- D. Visual Selection Specification: Where Specifications include the phrase "as selected by Architect from manufacturer's full range" or similar phrase, select a product that complies with

requirements. Architect will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.2 COMPARABLE PRODUCTS

A. Conditions for Consideration of Comparable Products: Architect will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Architect may return requests without action, except to record noncompliance with these requirements:

1. Evidence that proposed product does not require revisions to the Contract Documents, is consistent with the Contract Documents, will produce the indicated results, and is compatible with other portions of the Work. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant product qualities include attributes such as type, function, in-service performance and physical properties, weight, dimension, durability, visual characteristics, and other specific features and requirements.
2. Evidence that proposed product provides specified warranty.
3. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
4. Samples, if requested.

PART 3 - EXECUTION – NOT USED

END OF SECTION 01 6000

**SECTION 01 7000
EXECUTION AND CLOSEOUT REQUIREMENTS**

PART 1 – GENERAL

1.1 SECTION INCLUDES

- A. Project coordination.
- B. Pre-installation meetings.
- C. Examination, preparation, and general installation procedures.
- D. Requirements for alterations work, including selective demolition.
- E. Cutting and patching.
- F. Finishing.
- G. Progress cleaning.
- H. Protection of installed work.
- I. Final cleaning.
- J. Project record documentation.
- K. Inspection procedures.

1.2 PROJECT COORDINATION

- A. Coordinate scheduling, submittals, and work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- B. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- C. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- D. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- E. Coordinate completion and clean-up of work of separate sections.
- F. After Owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

1.3 PRE-INSTALLATION MEETINGS

- A. When required in individual specification sections, convene a pre-installation meeting at the site prior to commencing work of the section.
- B. Require attendance of parties directly affecting, or affected by, work of the specific section.
- C. Notify Architect four days in advance of meeting date.
- D. Prepare agenda and preside at meeting:
 - 1. Review conditions of examination, preparation and installation procedures.
 - 2. Review coordination with related work.
- E. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

1.4 EXAMINATION, PREPARATION, AND GENERAL INSTALLATION

- A. Examination:
 - 1. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
 - 2. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
 - 3. Examine and verify specific conditions described in individual specification sections.

4. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or mis-fabrication.
 5. Verify that utility services are available, of the correct characteristics, and in the correct locations.
 6. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.
- B. Preparation:
1. Clean substrate surfaces prior to applying next material or substance.
 2. Seal cracks or openings of substrate prior to applying next material or substance.
 3. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.
- C. General Installation: Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.

1.5 ALTERATIONS

- A. Verify that construction and utility arrangements are as shown.
- B. Report discrepancies to Architect before disturbing existing installation.
- C. Beginning of alterations work constitutes acceptance of existing conditions.
- D. Keep areas in which alterations are being conducted separated from other areas that are still occupied.
1. Provide, erect, and maintain temporary construction barriers.
- E. Remove existing work as indicated and as required to accomplish new work.
1. Remove items indicated on Drawings.
 2. Relocate items indicated on Drawings.
 3. Where new surface finishes are to be applied to existing work, perform removals, patch, and prepare existing surfaces as required to receive new finish..
 4. Where new surface finishes are not specified or indicated, patch holes and damaged surfaces to match adjacent finished surfaces as closely as possible.
- F. Protect existing work to remain.
1. Prevent movement of structure; provide shoring and bracing if necessary.
 2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
 3. Repair adjacent construction and finishes damaged during removal work at contractor's own expense.
- G. Adapt existing work to fit new work: Make as neat and smooth transition as possible.
- H. Patching: Where the existing surface is not indicated to be refinished, patch to match the surface finish that existed prior to cutting. Where the surface is indicated to be refinished, patch so that the substrate is ready for the new finish.
- I. Refinish existing surfaces as indicated:
1. Where surfaces are indicated to be refinished, refinish all visible existing surfaces to remain to the specified condition for each material, with a neat transition to adjacent finishes.
 2. If mechanical or electrical work is exposed accidentally during the work, re-cover and refinish to match.
- J. Remove demolition debris and abandoned items from alterations areas and dispose of off-site; do not burn or bury.
- K. Do not begin new construction in alterations areas before demolition is complete.
- L. Comply with all other applicable requirements of this section.

1.6 CUTTING AND PATCHING

- A. Cutting and Patching Proposal: Submit written request in advance of cutting or alteration that affects:
1. Structural integrity of any element of Project.
 2. Integrity of weather exposed or moisture resistant element.

3. Efficiency, maintenance, or safety of any operational element.
4. Visual qualities of exposed elements.
5. Include in request:
 - a. Identification of Project.
 - b. Location and description of affected work.
 - c. Necessity for cutting or alteration.
 - d. Description of proposed work and products to be used.
 - e. Effect on work of Owner.
 - f. Date and time work will be executed.
- C. Accurately record actual locations of capped and active utilities.
- D. Whenever possible, execute the work by methods that avoid cutting or patching. Perform only cutting and patching that is necessary for:
 1. Completing the work.
 2. Fit products together to integrate with other work.
 3. Provide openings for penetration of mechanical, electrical, and other services.
 4. Match work that has been cut to adjacent work.
 5. Repair areas adjacent to cuts to required condition.
 6. Repair new work damaged by subsequent work.
 7. Remove samples of installed work for testing when requested.
 8. Remove and replace defective and non-conforming work.
- C. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
- D. Employ original installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
- E. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
- F. Restore work with new products in accordance with requirements of Contract Documents.
- G. Patching:
 1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
 2. Match color, texture, and appearance.
 3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.

1.7 FINISHING

- A. Finish surfaces of installed work that have not been pre-finished by the manufacturer or fabricator, including but not limited to cementitious elements and other unfinished components. Comply with manufacturer's finishing recommendations.
- B. Finishing includes, as applicable, the following:
 1. Surface preparation.
 2. Priming and painting or sealing in accordance with the manufacturer's recommendations and the Owner's finish scheme.
 3. Sealing joints.
 4. Cleaning and protecting.
- C. Refer to Drawings for additional finishing requirements.

1.8 PROGRESS CLEANING

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

1.9 PROTECTION OF INSTALLED WORK

- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.
- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- E. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.

1.10 FINAL CLEANING

- A. Use cleaning materials that are nonhazardous.
- B. Clean site; sweep paved areas, rake clean landscaped surfaces.
- C. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.
- D. The Work and the site shall be sufficiently clean according to the Architect's inspection.

1.11 INSPECTION PROCEDURES

- A. The Contractor shall schedule and attend all inspections and make all corrections required by authorities having jurisdiction over the Project.
- B. Punch List Inspection:
 - 1. Notify the Architect in writing when work is considered ready for inspection for Substantial Completion.
 - 2. The Architect will perform an inspection, prepare a Punch List, and submit copies to the Contractor and the Owner.
 - a. If the Architect determines that the Work is not sufficiently complete for inspection, the inspection will be suspended and the Contractor and Owner notified. In such instance, the Contractor shall continue working until the Work is substantially complete and request re-inspection of the Work by the Architect.
 - 3. The Contractor shall correct all items described in the Architect's Punch List and submit written verification thereof. Refer to Section 01 7800 for additional information.
- B. Closeout Submittals: Refer to Section 01 7800

PART 2 - PRODUCTS

2.1 PATCHING MATERIALS

- A. New Materials: As specified in product sections; match existing products and work for patching and extending work.
- B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
- E. Verify that utility services are available, of the correct characteristics, and in the correct locations.

3.2 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

3.3 PREINSTALLATION MEETINGS

- A. When required in individual specification sections, convene a preinstallation meeting at the site prior to commencing work of the section.
- B. Require attendance of parties directly affecting, or affected by, work of the specific section.
- C. Notify Architect four days in advance of meeting date.
- D. Prepare agenda and preside at meeting:
 - 1. Review conditions of examination, preparation and installation procedures.
 - 2. Review coordination with related work.
- E. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.4 LAYING OUT THE WORK

- A. Verify locations of survey control points prior to starting work.
- B. Promptly notify Architect of any discrepancies discovered.
- C. Contractor shall locate and protect survey control and reference points.
- D. Protect survey control points prior to starting site work; preserve permanent reference points during construction.
- E. Promptly report to Architect the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.
- F. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Architect.
- G. Utilize recognized engineering survey practices.
- H. Establish a minimum of two permanent bench marks on site, referenced to established control points. Record locations, with horizontal and vertical data, on project record documents.
- I. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means:
 - 1. Site improvements including pavements; stakes for grading, fill and topsoil placement; utility locations, slopes, and invert elevations.
 - 2. Grid or axis for structures.
 - 3. Building foundation, column locations, ground floor elevations.
- J. Periodically verify layouts by same means.
- K. Maintain a complete and accurate log of control and survey work as it progresses.

3.5 GENERAL INSTALLATION REQUIREMENTS

- A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
- B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- E. Make neat transitions between different surfaces, maintaining texture and appearance.

3.6 PROGRESS CLEANING

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- D. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

3.7 PROTECTION OF INSTALLED WORK

- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.

- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- E. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- F. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- G. Prohibit traffic from landscaped areas.
- H. Remove protective coverings when no longer needed; reuse or recycle plastic coverings if possible.

3.8 SYSTEM STARTUP

- A. Coordinate schedule for start-up of various equipment and systems.
- B. Notify Architect and owner seven days prior to start-up of each item.
- C. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions that may cause damage.
- D. Verify tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- E. Verify that wiring and support components for equipment are complete and tested.
- F. Execute start-up under supervision of applicable Contractor personnel and manufacturer's representative in accordance with manufacturers' instructions.
- G. When specified in individual specification Sections, require manufacturer to provide authorized representative to be present at site to inspect, check, and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.
- H. Submit a written report that equipment or system has been properly installed and is functioning correctly.

3.9 DEMONSTRATION AND INSTRUCTION

- A. Demonstrate operation and maintenance of products to Owner's personnel two weeks prior to date of Substantial Completion.
- B. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with Owner's personnel in detail to explain all aspects of operation and maintenance.
- C. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.

3.10 ADJUSTING

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.

3.11 FINAL CLEANING

- A. Execute final cleaning prior to final project assessment.
 - 1. Clean areas to be occupied by Owner prior to final completion before Owner occupancy.
- B. Use cleaning materials that are nonhazardous.
- C. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- D. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment.
- E. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
- F. Clean filters of operating equipment.
- G. Clean debris from roofs, gutters, downspouts, and drainage systems.
- H. Clean site; sweep paved areas, rake clean landscaped surfaces.
- I. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

3.12 CLOSEOUT PROCEDURES

- A. Make submittals that are required by governing or other authorities.
 - 1. Provide copies to Architect and Owner.
 - a. Provide one electronic copy for Architect.
 - b. Provide one electronic copy and one paper hard copy for Owner.
- B. Notify Architect when work is considered ready for Substantial Completion.
- C. Submit written certification that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Architect's review.
- D. Correct items of work listed in executed Certificates of Substantial Completion and comply with requirements for access to Owner-occupied areas.
- E. Notify Architect when work is considered finally complete.
- F. Complete items of work determined by Architect's final inspection.

3.13 MAINTENANCE

- A. Provide service and maintenance of components indicated in specification sections.
- B. Maintenance Period: As indicated in specification sections or, if not indicated, not less than one year from the Date of Substantial Completion or the length of the specified warranty, whichever is longer.
- C. Examine system components at a frequency consistent with reliable operation. Clean, adjust, and lubricate as required.
- D. Include systematic examination, adjustment, and lubrication of components. Repair or replace parts whenever required. Use parts produced by the manufacturer of the original component.
- E. Maintenance service shall not be assigned or transferred to any agent or subcontractor without prior written consent of the Owner.

END OF SECTION 01 7000

**SECTION 01 7419
CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for the following:
 - 1. Salvaging nonhazardous demolition and construction waste.
 - 2. Recycling nonhazardous demolition and construction waste.
 - 3. Disposing of nonhazardous demolition and construction waste.

1.2 DEFINITIONS

- A. Construction Waste: Building, structure, and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
- B. Demolition Waste: Building, structure, and site improvement materials resulting from demolition operations.
- C. Disposal: Removal of demolition or construction waste and subsequent salvage, sale, recycling, or deposit in landfill, incinerator acceptable to authorities having jurisdiction, or designated spoil areas on Owner's property.
- D. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.
- E. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.
- F. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.

1.3 ACTION SUBMITTALS

- A. Waste Management Plan: Submit plan within 10 days of date established for the Notice to Proceed.

1.4 INFORMATIONAL SUBMITTALS

- A. Waste Reduction Progress Reports: Concurrent with each Application for Payment, submit report. Include the following information:
 - 1. Material category.
 - 2. Generation point of waste.
 - 3. Total quantity of waste in tons.
 - 4. Quantity of waste salvaged, both estimated and actual in tons.
 - 5. Quantity of waste recycled, both estimated and actual in tons.
 - 6. Total quantity of waste recovered (salvaged plus recycled) in tons.
 - 7. Total quantity of waste recovered (salvaged plus recycled) as a percentage of total waste.
- B. Waste Reduction Calculations: Before request for Substantial Completion, submit calculated end-of-Project rates for salvage, recycling, and disposal as a percentage of total waste generated by the Work.
- C. Records of Donations: Indicate receipt and acceptance of salvageable waste donated to individuals and organizations. Indicate whether organization is tax exempt.
- D. Records of Sales: Indicate receipt and acceptance of salvageable waste sold to individuals and organizations. Indicate whether organization is tax exempt.
- E. Recycling and Processing Facility Records: Indicate receipt and acceptance of recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
- F. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.

1.5 QUALITY ASSURANCE

- A. Waste Management Coordinator Qualifications: Experienced firm, or individual employed and assigned by General Contractor, with a record of successful waste management coordination of projects with similar requirements.
- B. Waste Management Conference(s): Conduct conference(s) at Project site to comply with requirements in Section 01 3100 "Project Management and Coordination."

1.6 WASTE MANAGEMENT PLAN

- A. General: Develop a waste management plan according to requirements in this Section. Plan shall consist of waste identification, waste reduction work plan, and cost/revenue analysis. Indicate quantities by weight or volume, but use same units of measure throughout waste management plan.
- B. Waste Identification: Indicate anticipated types and quantities of site-clearing and construction waste generated by the Work. Include estimated quantities and assumptions for estimates.
- C. Waste Reduction Work Plan: List each type of waste and whether it will be salvaged, recycled, or disposed of in landfill or incinerator. Include points of waste generation, total quantity of each type of waste, quantity for each means of recovery, and handling and transportation procedures.
 - 1. Salvaged Materials for Reuse: For materials that will be salvaged and reused in this Project, describe methods for preparing salvaged materials before incorporation into the Work.
 - 2. Salvaged Materials for Sale: For materials that will be sold to individuals and organizations, include list of their names, addresses, and telephone numbers.
 - 3. Salvaged Materials for Donation: For materials that will be donated to individuals and organizations, include list of their names, addresses, and telephone numbers.
 - 4. Recycled Materials: Include list of local receivers and processors and type of recycled materials each will accept. Include names, addresses, and telephone numbers.
 - 5. Disposed Materials: Indicate how and where materials will be disposed of. Include name, address, and telephone number of each landfill and incinerator facility.
 - 6. Handling and Transportation Procedures: Include method that will be used for separating recyclable waste including sizes of containers, container labeling, and designated location where materials separation will be performed.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. General: Facilitate recycling and salvage of materials.

PART 3 - EXECUTION

3.1 PLAN IMPLEMENTATION

- A. General: Implement approved waste management plan. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract.
- B. Waste Management Coordinator: Engage a waste management coordinator to be responsible for implementing, monitoring, and reporting status of waste management work plan.
- C. Training: Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work.
 - 1. Distribute waste management plan to everyone concerned within three days of submittal return.
 - 2. Distribute waste management plan to entities when they first begin work on-site. Review plan procedures and locations established for salvage, recycling, and disposal.
- D. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
 - 1. Designate and label specific areas on Project site necessary for separating materials that are to be salvaged and recycled.

2. Comply with Section 01 5000 "Temporary Facilities and Controls" for controlling dust and dirt, environmental protection, and noise control.

3.2 SALVAGING DEMOLITION WASTE

- A. Salvaged Items for Sale or Donation: Not permitted on Project site.

3.3 RECYCLING DEMOLITION AND CONSTRUCTION WASTE, GENERAL

- A. General: Recycle paper and beverage containers used by on-site workers.
- B. Recycling Incentives: Revenues, savings, rebates, tax credits, and other incentives received for recycling waste materials shall be shared equally by Owner and Contractor.
- C. Preparation of Waste: Prepare and maintain recyclable waste materials according to recycling or reuse facility requirements. Maintain materials free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to the recycling process.
- D. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical according to approved construction waste management plan.
 1. Provide appropriately marked containers or bins for controlling recyclable waste until removed from Project site. Include list of acceptable and unacceptable materials at each container and bin.
 - a. Inspect containers and bins for contamination and remove contaminated materials if found.
 2. Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 3. Stockpile materials away from construction area. Do not store within drip line of remaining trees.
 4. Store components off the ground and protect from the weather.
 5. Remove recyclable waste from Owner's property and transport to recycling receiver or processor as often as required to prevent overfilling bins.

3.4 RECYCLING DEMOLITION WASTE

- A. Asphalt Paving: Break up and transport paving to asphalt-recycling facility.
- B. Concrete: Remove reinforcement and other metals from concrete and sort with other metals.
- C. Masonry: Remove metal reinforcement, anchors, and ties from masonry and sort with other metals.
- D. Metals: Separate metals by type.

3.5 RECYCLING CONSTRUCTION WASTE

- A. Packaging:
 1. Cardboard and Boxes: Break down packaging into flat sheets. Bundle and store in a dry location.
 2. Polystyrene Packaging: Separate and bag materials.
 3. Pallets: As much as possible, require deliveries using pallets to remove pallets from Project site. For pallets that remain on-site, break down pallets into component wood pieces and comply with requirements for recycling wood.
 4. Crates: Break down crates into component wood pieces and comply with requirements for recycling wood.
- B. Wood Materials:
 1. Clean Cut-Offs of Lumber: Grind or chip into small pieces.
 2. Clean Sawdust: Bag sawdust that does not contain painted or treated wood.
- C. Gypsum Board: Stack large clean pieces on wood pallets or in container and store in a dry location.
- D. Paint: Seal containers and store by type.

3.6 DISPOSAL OF WASTE

- A. General: Except for items or materials to be salvaged or recycled, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
 - 1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Do not burn waste materials.

3.7 ATTACHMENTS

END OF SECTION 01 7419

**SECTION 01 7700
CLOSEOUT PROCEDURES**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Substantial Completion procedures.
 - 2. Final completion procedures.
 - 3. Warranties.
 - 4. Final cleaning.
 - 5. Repair of the Work.
- B. Related Requirements:
 - 1. Section 01 7823 – Operation and Maintenance Data for additional operation and maintenance manual requirements.
 - 2. Section 01 7839 – Project Record Documents for submitting Record Drawings, Record Specifications, and Record Product Data.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of cleaning agent.
- B. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.
- C. Certified List of Incomplete Items: Final submittal at final completion.

1.3 CLOSEOUT SUBMITTALS

- A. Certificates of Release: From authorities having jurisdiction.
- B. Certificate of Insurance: For continuing coverage.
- C. Field Report: For pest control inspection.

1.4 SUBSTANTIAL COMPLETION PROCEDURES

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.
- B. Submittals Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - 1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 2. Submit closeout submittals specified in other Division 01 Sections, including project record documents, operation and maintenance manuals, damage or settlement surveys, property surveys, and similar final record information.
 - 3. Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - 4. Submit maintenance material submittals specified in individual Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Architect. Label with manufacturer's name and model number.
 - 5. Submit testing, adjusting, and balancing records.
 - 6. Submit sustainable design submittals not previously submitted.
 - 7. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
- C. Procedures Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - 1. Advise Owner of pending insurance changeover requirements.

2. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
 3. Complete startup and testing of systems and equipment.
 4. Perform preventive maintenance on equipment used prior to Substantial Completion.
 5. Advise Owner of changeover in utility services.
 6. Participate with Owner in conducting inspection and walkthrough with local emergency responders.
 7. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
 8. Complete final cleaning requirements.
 9. Touch up paint and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of 10 days prior to date the Work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.

1.5 FINAL COMPLETION PROCEDURES

- A. Submittals Prior to Final Completion: Before requesting final inspection for determining final completion, complete the following:
1. Submit a final Application for Payment according to Section 01 2900 – Payment Procedures.
 2. Certified List of Incomplete Items: Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
 4. Submit pest-control final inspection report.
- B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of 10 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.

1.6 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
1. Organize list of spaces in sequential order, starting with exterior areas first and [proceeding from lowest floor to highest floor.
 2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
 3. Submit list of incomplete items in the following format:
 - a. PDF electronic file. Architect will return annotated file.

1.7 SUBMITTAL OF PROJECT WARRANTIES

- A. Time of Submittal: Submit written warranties on request of Architect for designated portions of the Work where warranties are indicated to commence on dates other than date of Substantial Completion, or when delay in submittal of warranties might limit Owner's rights under warranty.
- B. Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.

- C. Warranty Electronic File: Provide warranties and bonds in PDF format. Assemble complete warranty and bond submittal package into a single electronic PDF file with bookmarks enabling navigation to each item. Provide bookmarked table of contents at beginning of document.
 - 1. Submit via email, upload to web-based account, or provide on digital media acceptable to Architect.
- D. Warranties in Paper Form:
 - 1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
- E. Provide additional copies of each warranty to include in operation and maintenance manuals as required by owner.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:
 - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 - c. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
 - d. Sweep concrete floors broom clean in unoccupied spaces.
 - e. Vacuum carpet and similar soft surfaces, removing debris and excess nap; clean according to manufacturer's recommendations if visible soil or stains remain.
 - f. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
 - g. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
 - h. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency.
 - i. Leave Project clean and ready for occupancy.
- C. Pest Control: Comply with pest control requirements in Section 01 5000 "Temporary Facilities and Controls." Prepare written report.

3.2 REPAIR OF THE WORK

- A. Complete repair and restoration operations, before requesting inspection for determination of Substantial Completion.
- B. Repair, or remove and replace, defective construction. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired.

Restore damaged construction and permanent facilities used during construction to specified condition.

END OF SECTION 01 7700

**SECTION 01 7800
CLOSEOUT SUBMITTALS**

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Project Record Documents.
- B. Operation and Maintenance Data.
- C. Warranties and bonds.

1.2 RELATED REQUIREMENTS

- A. Section 01 3000 – Administrative Requirements: Submittals procedures, shop drawings, product data, and samples.
- B. Section 01 7000 – Execution and Closeout Requirements: Contract closeout procedures.
- C. Individual Product Sections: Specific requirements for operation and maintenance data.
- D. Individual Product Sections: Warranties required for specific products or Work.

1.3 SUBMITTALS

- A. Project Record Documents: Submit documents to Architect with claim for final Application for Payment.
- B. Operation and Maintenance Data:
 - 1. Submit one copy of preliminary draft or proposed formats and outlines of contents electronically before start of Work. Architect will review draft and return with comments.
 - 2. For equipment, or component parts of equipment put into service during construction and operated by Owner, submit completed documents within ten days after acceptance.
 - 3. Submit one copy of completed documents 15 days prior to final inspection. This copy will be reviewed and returned after final inspection, with Architect comments. Electronic submission will be accepted. Revise content of all document sets as required prior to final submission.
 - 4. Submit revised final documents in final form within 10 days after final inspection.
 - a. Submit one electronic copy to Architect.
 - b. Submit one electronic copy and one paper hard copy to Owner.
- C. Warranties and Bonds:
 - 1. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within 10 days after acceptance.
 - 2. Make other submittals within 10 days after Date of Substantial Completion, prior to final Application for Payment.
 - 3. For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within 10 days after acceptance, listing the date of acceptance as the beginning of the warranty period.
- D. Test Reports:
 - 1. Copies of all test reports as described in 01 4000 Quality Requirements, and in the contract documents.
- E. Record Specifications.
- F. Inspections:
 - 1. Inspections made by authorities having jurisdiction.
 - 2. The Contractor's punch list inspection.
- G. Final Payment Submittals:
 - 1. Affidavit of payment.
 - 2. Affidavit of release of liens.
 - 3. Consent of surety.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other modifications to the Contract.
 - 5. Reviewed shop drawings, product data, and samples.
 - 6. Manufacturer's instruction for assembly, installation, and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress.
- E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
 - 1. Manufacturer's name and product model and number.
 - 2. Product substitutions or alternates utilized.
 - 3. Changes made by Addenda and modifications.
- F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
 - 1. Field changes of dimension and detail.
 - 2. Details not on original Contract drawings.

3.2 OPERATION AND MAINTENANCE DATA

- A. For Each Product or System: List names, addresses and telephone numbers of Subcontractors and suppliers, including local source of supplies and replacement parts.
- B. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
- C. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
- D. Typed Text: As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.

3.3 OPERATION AND MAINTENANCE DATA FOR MATERIALS AND FINISHES

- A. For Each Product, Applied Material, and Finish:
- B. Instructions for Care and Maintenance: Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental cleaning agents and methods, and recommended schedule for cleaning and maintenance.

3.4 OPERATION AND MAINTENANCE DATA FOR EQUIPMENT AND SYSTEMS

- A. For Each Item of Equipment and Each System:
 - 1. Description of unit or system, and component parts.
 - 2. Identify function, normal operating characteristics, and limiting conditions.
 - 3. Include performance curves, with engineering data and tests.
 - 4. Complete nomenclature and model number of replaceable parts.
- B. Panelboard Circuit Directories: Provide electrical service characteristics, controls, and communications; typed.
- C. Operating Procedures: Include start-up, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shut-down, and emergency instructions. Include summer, winter, and any special operating instructions.
- D. Maintenance Requirements: Include routine procedures and guide for preventative maintenance and troubleshooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.

- E. Provide servicing and lubrication schedule, and list of lubricants required.
- F. Include manufacturer's printed operation and maintenance instructions.
- G. Include sequence of operation by controls manufacturer.
- H. Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- I. Additional Requirements: As specified in individual product specification sections.

3.5 OPERATION AND MAINTENANCE MANUALS

- A. Prepare instructions and data by personnel experienced in maintenance and operation of described products.
- B. Prepare data in the form of an instructional manual.
- C. Binders: Commercial quality, 8-1/2 by 11-inch three D side ring binders with durable plastic covers; 2-inch maximum ring size. When multiple binders are used, correlate data into related consistent groupings.
- D. Cover: Identify each binder with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; identify title of Project; identify subject matter of contents.
- E. Provide tabbed dividers for each separate product and system, with typed description of product and major component parts of equipment.
- F. Text: Manufacturer's printed data, or typewritten data on 24-pound paper.
- G. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
- H. Arrange content by systems under section numbers and sequence of Table of Contents of this Project Manual.
- I. Contents: Prepare a Table of Contents for each volume, with each product or system description identified, in three parts as follows:
 - 1. Part 1: Directory, listing names, addresses, and telephone numbers of Architect, Contractor, Subcontractors, and major equipment suppliers.
 - 2. Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:
 - a. Significant design criteria.
 - b. List of equipment.
 - c. Parts list for each component.
 - d. Operating instructions.
 - e. Maintenance instructions for equipment and systems.
 - f. Maintenance instructions for special finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents.
 - 3. Part 3: Project documents and certificates, including the following:
 - a. Shop drawings and product data.

3.6 WARRANTIES AND BONDS

- A. Obtain warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within 10 days after completion of the applicable item of work. Except for items put into use with Owner's permission, leave date of beginning of time of warranty until the Date of Substantial completion is determined.
- B. Verify that documents are in proper form, contain full information, and are notarized.
- C. Co-execute submittals when required.
- D. Retain warranties and bonds until time specified for submittal.
- E. Manual: Bind in commercial quality 8-1/2 by 11-inch three D side ring binders with durable plastic covers.
- F. Cover: Identify each binder with typed or printed title WARRANTIES AND BONDS, with title of Project; name, address and telephone number of Contractor and equipment supplier; and name of responsible company principal.

- G. Table of Contents: Neatly typed, in the sequence of the Table of Contents of the Project Manual, with each item identified with the number and title of the specification section in which specified, and the name of product or work item.
- H. Separate each warranty or bond with index tab sheets keyed to the Table of Contents listing. Provide full information, using separate typed sheets as necessary. List Subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal.

END OF SECTION 01 7800

**SECTION 01 7823
OPERATION AND MAINTENANCE DATA**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
 - 1. Operation and maintenance documentation directory manuals.
 - 2. Emergency manuals.
 - 3. Systems and equipment operation manuals.
 - 4. Systems and equipment maintenance manuals.
 - 5. Product maintenance manuals.

1.2 CLOSEOUT SUBMITTALS

- A. Submit operation and maintenance manuals indicated. Provide content for each manual as specified in individual Specification Sections, and as reviewed and approved at the time of Section submittals. Submit reviewed manual content formatted and organized as required by this Section.
 - 1. Architect will comment on whether content of operation and maintenance submittals is acceptable.
 - 2. Where applicable, clarify and update reviewed manual content to correspond to revisions and field conditions.
- B. Format: Submit operation and maintenance manuals in the following format:
 - 1. Submit on digital media acceptable to Architect, or by uploading to web-based project site. Enable reviewer comments on draft submittals.
- C. Final Manual Submittal: Submit each manual in final form prior to requesting inspection for Substantial Completion and at least 15 days before commencing demonstration and training. Architect will return copy with comments.
 - 1. Correct or revise each manual to comply with Architect's comments. Submit copies of each corrected manual within 15 days of receipt of Architect's comments and prior to commencing demonstration and training.
- D. Comply with Section 01 7700 – Closeout Procedures for schedule for submitting operation and maintenance documentation.

1.3 FORMAT OF OPERATION AND MAINTENANCE MANUALS

- A. Manuals, Electronic Files: Submit manuals in the form of a multiple file composite electronic PDF file for each manual type required.
 - 1. Electronic Files: Use electronic files prepared by manufacturer where available. Where scanning of paper documents is required, configure scanned file for minimum readable file size.
 - 2. File Names and Bookmarks: Bookmark individual documents based on file names. Name document files to correspond to system, subsystem, and equipment names used in manual directory and table of contents. Group documents for each system and subsystem into individual composite bookmarked files, then create composite manual, so that resulting bookmarks reflect the system, subsystem, and equipment names in a readily navigated file tree. Configure electronic manual to display bookmark panel on opening file.
- B. Manuals, Paper Copy: Submit manuals in the form of hard-copy, bound and labeled volumes as requested by owner – up to (3) copies.
 - 1. Binders: Heavy-duty, three-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.
 - 2. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.

- a. If oversized drawings are necessary, fold drawings to same size as text pages and use as foldouts.
- b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

1.4 REQUIREMENTS FOR EMERGENCY, OPERATION, AND MAINTENANCE MANUALS

- A. Organization of Manuals: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:
 - 1. Title page.
 - 2. Table of contents.
 - 3. Manual contents.
- B. Title Page: Include the following information:
 - 1. Subject matter included in manual.
 - 2. Name and address of Project.
 - 3. Name and address of Owner.
 - 4. Date of submittal.
 - 5. Name and contact information for Contractor.
 - 6. Name and contact information for Construction Manager.
 - 7. Name and contact information for Architect.
 - 8. Name and contact information for Commissioning Authority.
 - 9. Names and contact information for major consultants to the Architect that designed the systems contained in the manuals.
 - 10. Cross-reference to related systems in other operation and maintenance manuals.
- C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.
- D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.
- E. Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with same designation used in the Contract Documents. If no designation exists, assign a designation according to ASHRAE Guideline 4, "Preparation of Operating and Maintenance Documentation for Building Systems."

1.5 EMERGENCY MANUALS

- A. Emergency Manual: Assemble a complete set of emergency information indicating procedures for use by emergency personnel and by Owner's operating personnel for types of emergencies indicated.
- B. Content: Organize manual into a separate section for each of the following:
 - 1. Type of emergency.
 - 2. Emergency instructions.
 - 3. Emergency procedures.
- C. Type of Emergency: Where applicable for each type of emergency indicated below, include instructions and procedures for each system, subsystem, piece of equipment, and component:
 - 1. Fire.
 - 2. Flood.
 - 3. Gas leak.
 - 4. Water leak.
 - 5. Power failure.
 - 6. Water outage.
 - 7. System, subsystem, or equipment failure.

8. Chemical release or spill.
- D. Emergency Instructions: Describe and explain warnings, trouble indications, error messages, and similar codes and signals. Include responsibilities of Owner's operating personnel for notification of Installer, supplier, and manufacturer to maintain warranties.
- E. Emergency Procedures: Include the following, as applicable:
 1. Instructions on stopping.
 2. Shutdown instructions for each type of emergency.
 3. Operating instructions for conditions outside normal operating limits.
 4. Required sequences for electric or electronic systems.
 5. Special operating instructions and procedures.

1.6 SYSTEMS AND EQUIPMENT OPERATION MANUALS

- A. Systems and Equipment Operation Manual: Assemble a complete set of data indicating operation of each system, subsystem, and piece of equipment not part of a system. Include information required for daily operation and management, operating standards, and routine and special operating procedures.
- B. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and the following information:
 1. System, subsystem, and equipment descriptions. Use designations for systems and equipment indicated on Contract Documents.
 2. Performance and design criteria if Contractor have delegated design responsibility.
 3. Operating standards.
 4. Operating procedures.
 5. Operating logs.
 6. Wiring diagrams.
 7. Control diagrams.
 8. Piped system diagrams.
 9. Precautions against improper use.
 10. License requirements including inspection and renewal dates.
- C. Descriptions: Include the following:
 1. Product name and model number. Use designations for products indicated on Contract Documents.
 2. Manufacturer's name.
 3. Equipment identification with serial number of each component.
 4. Equipment function.
 5. Operating characteristics.
 6. Limiting conditions.
 7. Performance curves.
 8. Engineering data and tests.
 9. Complete nomenclature and number of replacement parts.
- D. Operating Procedures: Include the following, as applicable:
 1. Startup procedures.
 2. Equipment or system break-in procedures.
 3. Routine and normal operating instructions.
 4. Regulation and control procedures.
 5. Instructions on stopping.
 6. Normal shutdown instructions.
 7. Seasonal and weekend operating instructions.
 8. Required sequences for electric or electronic systems.
 9. Special operating instructions and procedures.
- E. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.
- F. Piped Systems: Diagram piping as installed, and identify color coding where required for identification.

1.7 SYSTEMS AND EQUIPMENT MAINTENANCE MANUALS

- A. Systems and Equipment Maintenance Manuals: Assemble a complete set of data indicating maintenance of each system, subsystem, and piece of equipment not part of a system. Include manufacturers' maintenance documentation, preventive maintenance procedures and frequency, repair procedures, wiring and systems diagrams, lists of spare parts, and warranty information.
- B. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranties and bonds, as described below.
- C. Manufacturers' Maintenance Documentation: Include the following information for each component part or piece of equipment:
 - 1. Standard maintenance instructions and bulletins; include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.
 - a. Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.
 - 2. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
 - 3. Identification and nomenclature of parts and components.
 - 4. List of items recommended to be stocked as spare parts.
- D. Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:
 - 1. Test and inspection instructions.
 - 2. Troubleshooting guide.
 - 3. Precautions against improper maintenance.
 - 4. Disassembly; component removal, repair, and replacement; and reassembly instructions.
 - 5. Aligning, adjusting, and checking instructions.
 - 6. Demonstration and training video recording, if available.
- E. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.
- F. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.
- G. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
 - 1. Include procedures to follow and required notifications for warranty claims.
- H. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in record Drawings to ensure correct illustration of completed installation.

1.8 PRODUCT MAINTENANCE MANUALS

- A. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- B. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
- C. Product Information: Include the following, as applicable:
 - 1. Product name and model number.
 - 2. Manufacturer's name.

3. Color, pattern, and texture.
 4. Material and chemical composition.
 5. Reordering information for specially manufactured products.
- D. Maintenance Procedures: Include manufacturer's written recommendations and the following:
1. Inspection procedures.
 2. Types of cleaning agents to be used and methods of cleaning.
 3. List of cleaning agents and methods of cleaning detrimental to product.
 4. Schedule for routine cleaning and maintenance.
 5. Repair instructions.
- E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
1. Include procedures to follow and required notifications for warranty claims.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION 01 7823

**SECTION 01 7839
PROJECT RECORD DOCUMENTS**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for project record documents, including the following:
 - 1. Record Drawings.
 - 2. Record Specifications.
 - 3. Record Product Data.
- B. Related Requirements:
 - 1. Section 01 7000 – Execution Requirements.
 - 2. Section 01 7700 – Closeout Procedures.
 - 3. Section 01 7823 – Operation and Maintenance Data for operation and maintenance manual requirements.

1.2 CLOSEOUT SUBMITTALS

- A. Record Drawings: Comply with the following:
 - 1. Number of Copies: Submit one set of marked-up record prints.
 - 2. Number of Copies: Submit copies of record Drawings as follows:
 - a. Initial Submittal:
 - 1) Submit PDF electronic files of scanned record prints
 - 2) Architect will indicate whether general scope of changes, additional information recorded, and quality of drafting are acceptable.
 - b. Final Submittal:
 - 1) Submit up to three paper-copy set(s) of marked-up record prints, as requested by Owner.
 - 2) Submit PDF electronic files of scanned record prints.
 - 3) Include each drawing, whether or not changes and additional information were recorded.
 - c. Final Submittal:
 - 1) Submit up to three paper-copy set(s) of marked-up record prints, as requested by Owner.
 - 2) Submit record digital data files
 - 3) Include each drawing file, whether or not changes and additional information were recorded.
- B. Record Specifications: Submit one annotated PDF electronic file of Project's Specifications, including addenda and contract modifications. Provide up to (3) paper copies as required by Owner.
- C. Record Product Data: Submit annotated PDF electronic files and directories of each submittal.
 - 1. Where record Product Data are required as part of operation and maintenance manuals, submit duplicate marked-up Product Data as a component of manual.

1.3 RECORD DRAWINGS

- A. Record Prints: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued.
 - 1. Preparation: Mark record prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.
 - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
 - b. Accurately record information in an acceptable drawing technique.
 - c. Record data as soon as possible after obtaining it.
 - d. Record and check the markup before enclosing concealed installations.

- e. Cross-reference record prints to corresponding photographic documentation.
 - 2. Content: Types of items requiring marking include, but are not limited to, the following:
 - a. Dimensional changes to Drawings.
 - b. Revisions to details shown on Drawings.
 - c. Depths of foundations.
 - d. Locations and depths of underground utilities.
 - e. Revisions to routing of piping and conduits.
 - f. Revisions to electrical circuitry.
 - g. Actual equipment locations.
 - h. Duct size and routing.
 - i. Locations of concealed internal utilities.
 - j. Changes made by Change Order or Change Directive.
 - k. Changes made following Architect's written orders.
 - l. Details not on the original Contract Drawings.
 - m. Field records for variable and concealed conditions.
 - n. Record information on the Work that is shown only schematically.
 - 3. Mark the Contract Drawings and Shop Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up record prints.
 - 4. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
 - 5. Mark important additional information that was either shown schematically or omitted from original Drawings.
 - 6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
 - B. Record Digital Data Files: Immediately before inspection for Certificate of Substantial Completion, review marked-up record prints with Architect. When authorized, prepare a full set of the Record Drawings, as follows:
 - 1. Format: Annotated PDF electronic file.
 - 2. Incorporate changes and additional information previously marked on record prints.
 - 3. Refer instances of uncertainty to Architect for resolution.
 - 4. Architect will furnish Contractor with one set of digital data files of the Contract Drawings for use in recording information.
 - a. See Section 013100 – Project Management and Coordination for requirements related to use of Architect's digital data files.
 - b. Architect will provide data file layer information. Record markups in separate layers.
 - C. Format: Identify and date each record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
 - 1. Record Prints: Organize record prints into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
 - 2. Format: Annotated PDF electronic file.
- 1.4 RECORD SPECIFICATIONS**
- A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
 - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 - 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
 - 3. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
 - 4. For each principal product, indicate whether record Product Data has been submitted in operation and maintenance manuals instead of submitted as record Product Data.

5. Note related Change Orders, record Product Data, and record Drawings where applicable.
- B. Format: Submit record Specifications as one annotated PDF electronic file of Project's Specifications, including addenda and contract modifications. Provide up to (3) paper copies as required by Owner.

1.5 RECORD PRODUCT DATA

- A. Recording: Maintain one copy of each submittal during the construction period for project record document purposes. Post changes and revisions to project record documents as they occur; do not wait until end of Project.
- B. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
 3. Note related Change Orders, record Specifications, and record Drawings where applicable.
- C. Format: Submit record Product Data as one annotated PDF electronic file of Project's Specifications, including addenda and contract modifications. Provide up to (3) paper copies as required by Owner.
 1. Include record Product Data directory organized by Specification Section number and title, electronically linked to each item of record Product Data.

1.6 MAINTENANCE OF RECORD DOCUMENTS

- A. Maintenance of Record Documents: Store record documents in the field office apart from the Contract Documents used for construction. Do not use project record documents for construction purposes. Maintain record documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to project record documents for Architect's reference during normal working hours.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION 01 7839

**SECTION 06 1000
ROUGH CARPENTRY**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the contract including General, Supplemental and Special Conditions, and other Division 1 Specification sections apply to work of this section.
- B. **ALTERNATE 1:** Section 00 7316 Build America, Buy America (BABA) Requirements

1.2 WORK INCLUDED

Installation of new wood nailers, blocking, curbs, etc., where required for roofing application, and to replace existing wood found to be in deteriorated condition.

1.3 REFERENCES

- A. ASTM E-84: Standard Test Method for Surface Burning Characteristics of Building Materials; 1995.
- B. NFPA 255: Standard Method of Test for Surface Burning Characteristics of Building Materials; 1996.
- C. PS 20: American Softwood Lumber Standard; National Institute of Standards and Technology (Department of Commerce); 1999.
- D. SPIB (GR): Standard Grading Rules for Southern Pine Lumber; Southern Pine Inspection Bureau, Inc.; 1994.
- E. UL 723: Standard Method of Test for Surface Burning Characteristics of Building Materials; 1993.
- F. WCLB (GR): Standard Grading Rules for West Coast Lumber No. 17; West Coast Lumber Inspection Bureau; 1996, Suppl. VII (1996) & VIII (1997).
- G. WWPA G-5: Western Lumber Grading Rules; Western Wood Products Association; 1998.
- H. US DOC PS1 and US DOC PS2 and the Standards of the American Plywood Association.

1.4 SUBMITTALS

- A. Product Data: Provide technical data on insulated sheathing and wood preservative materials.
- B. Manufacturer's Certificate: Certify that wood products supplied for rough carpentry meet or exceed specified requirements.
- C. **ALTERNATE 1:** The Contractor shall submit the following documentation for each article, material or supply that must meet the BABA requirements:
 - 1. A certificate from the manufacturer or reseller that the product complies.
 - 2. For products that cost less than \$100 per product, a copy of the label that indicates the product was made in the United States is acceptable to HUD.

1.5 QUALITY ASSURANCE

- A. Lumber: Comply with PS 20 and approved grading rules and inspection agencies.
 - 1. Acceptable Lumber Inspection Agencies: RIS, SPIB, WCLB, and WWPA.
 - 2. Lumber of other species or grades, or graded by other agencies, is acceptable, provided that the structural and appearance characteristics are equivalent to or better than the products specified.
- B. Contractor shall provide sufficient qualified workmen and supervisors who shall be present at all times during execution of this portion of the work and who shall be familiar with the type of construction involved and the materials and techniques specified.
- C. The Owner shall make no allowance for lack of skill of the workmen, or the lack of qualified workmen to meet the schedule.

1.6 DELIVERY, STORAGE, AND HANDLING

Cover wood products to protect against moisture. Support stacked products to prevent deformation and to allow air circulation.

1.7 WARRANTY

See Section 07 5320 – “Thermoset Single-Ply Sheet Roofing” for roof warranty requirements.

1.8 ENVIRONMENTAL CONDITIONS

Material installation shall proceed only when weather conditions are in compliance with the manufacturer's recommendations for installation and no precipitation is imminent. Materials installed during adverse weather conditions shall be subject to rejection, including removal and replacement.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Board Wood: Shall be No. 2, or better, southern yellow pine, kiln-dried. Shall be sound, thoroughly seasoned, dressed to nominal finish dimension, and free of warpage, cupping, and bowing. Dimensions shall be determined by job conditions. Treated for exterior exposure.
- B. Wood Structural Panel Sheathing (Plywood or Oriented Strand Board): Shall be stamped APA RATED SHEATHING, Grade C-C or better, and shall be manufactured with exterior glue (exposure 1). Wood structural panels shall be 23/32 inch in thickness, or as otherwise noted or required to match existing conditions.

2.2 ACCESSORIES

- A. Nails shall be ring shank 16-penny, or 8-penny cement coated (untreated wood); use ring shank stainless steel nails for treated wood locations.

2.3 DIMENSION LUMBER FOR CONCEALED APPLICATIONS

- A. Grading Agency: Southern Pine Inspection Bureau, Inc. (SPIB)
- B. Sizes: Nominal sizes as indicated on drawings, S4S.
- C. Moisture Content: S-dry or MC19.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Verify that existing construction is sound and dry so as to adequately support new roofing components. Replace any wood found to be deteriorated.
- B. Verify that curbs are sound, firmly anchored, smooth, and clean on surfaces to receive new nailers.
- C. The Owner's Representative and the Contractor shall document the actual quantities of materials installed.

3.2 INSTALLATION

- A. Anchor nailers securely to underlying construction as required in the project details. Perimeter nailers shall be anchored in accordance with FM Loss Prevention Data Sheet 1-49.
- B. All nailers shall be of sufficient thickness so as to be flush (in height) with the roof insulation and securely anchored with the appropriate fasteners to resist a force of 300 lbs/linear foot in any direction.
- C. Wood nailers and blocking shall be secured with a minimum of two fasteners per piece. Fasteners shall be positioned (in sets of 2) 6 inches from each end and 12" o.c. staggered or in sets of two (2) a maximum of 2 feet o.c.
- D. Anchors used to secure new wood nailers, blocking, etc., shall be countersunk to provide a flush finish. Pre-drill lumber and deck where required to prevent damage to decking materials.
- E. Nailers shall be grooved for edge venting; install at walls, curbs, and other vertical surfaces with a 1/4-inch gap between each length.
- F. New wood nailers, blocking, etc., shall be chamfered, beveled, shaved, planed, or shimmed as necessary to provide smooth transition to adjacent materials.
- G. Stagger wood nailers at overlapping conditions by minimum of two feet. Alternate nailers at corners to avoid edge on top of edge conditions.
- H. Separate wood from masonry and from metal with a felt separator (30# asphalt felt).

3.3 COORDINATION

- A. Cover unprotected wood with specified material as soon as practical. No wood is to be exposed and

uncovered for more than 3 days.

END OF SECTION 06 1000

**SECTION 06 1600
SHEATHING**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Subflooring.
 - 2. Sheathing joint and penetration treatment
- B. **RELATED DOCUMENTS:**
 - 1. **ALTERNATE 1:** Section 00 7316 Build America, Buy America (BABA) Requirements

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of process and factory-fabricated product.
- B. **ALTERNATE 1:** The Contractor shall submit the following documentation for each article, material or supply that must meet the BABA requirements:
 - 1. A certificate from the manufacturer or reseller that the product complies.
 - 2. For products that cost less than \$100 per product, a copy of the label that indicates the product was made in the United States is acceptable to HUD.

1.3 INFORMATIONAL SUBMITTALS

- A. Evaluation Reports: For the following, from ICC-ES:
 - 1. Wood-preservative-treated plywood.
 - 2. Fire-retardant-treated plywood.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Fire-Resistance Ratings: As tested according to ASTM E 119; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - 1. Fire-Resistance Ratings: Indicated by design designations from UL's "Fire Resistance Directory" or from the listings of another qualified testing agency.

2.2 WOOD PANEL PRODUCTS

- A. Emissions: Products shall meet the testing and product requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."

2.3 FIRE-RETARDANT-TREATED PLYWOOD

- A. General: Where fire-retardant-treated materials are indicated, use materials complying with requirements in this article that are acceptable to authorities having jurisdiction and with fire-test-response characteristics specified as determined by testing identical products per test method indicated by a qualified testing agency.
- B. Fire-Retardant-Treated Plywood by Pressure Process: Products with a flame-spread index of 25 or less when tested according to ASTM E 84, and with no evidence of significant progressive combustion when the test is extended an additional 20 minutes, and with the flame front not extending more than 10.5 feet beyond the centerline of the burners at any time during the test.
 - 1. Interior Type A: Treated materials shall have a moisture content of 28 percent or less when tested according to ASTM D 3201/D 3201M at 92 percent relative humidity. Use where exterior type is not indicated.
 - 2. Design Value Adjustment Factors: Treated lumber plywood shall be tested according to ASTM D 5516 and design value adjustment factors shall be calculated according to ASTM D 6305. Span ratings after treatment shall be not less than span ratings specified
- C. Kiln-dry material after treatment to a maximum moisture content of 15 percent.
- D. Identify fire-retardant-treated plywood with appropriate classification marking of qualified testing agency.
- E. Application: Treat all plywood unless otherwise indicated.

2.4 WALL SHEATHING

- A. Plywood Sheathing: Exterior, Structural sheathing.
- B. Oriented-Strand-Board Sheathing: DOC PS 2, Exposure 1, Structural I sheathing.
- C. Span Rating: Not less than 32/16.
- D. Nominal Thickness: Match existing but not less than 1/2 inch.

2.5 PLYWOOD SUBFLOORING

- A. Plywood Sheathing: Exposure I, Structural I single floor panels or sheathing.
 - 1. Span Rating: Not less than 40/20.
 - 2. Nominal Thickness: Match existing but not less than 19/32 inch.

2.6 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material.
- B. Nails, Brads, and Staples: ASTM F 1667.
- C. Power-Driven Fasteners: Fastner systems with an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC70.
- D. Screws for Fastening Sheathing to Wood Framing: ASTM C1002.

2.7 MISCELLANEOUS MATERIALS

- A. Adhesives for Field Gluing Panels to Wood Framing: Formulation complying with **APA AFG-01** that is approved for use with type of construction panel indicated by manufacturers of both adhesives and panels.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Do not use materials with defects that impair quality of sheathing or pieces that are too small to use with minimum number of joints or optimum joint arrangement. Arrange joints so that pieces do not span between fewer than three support members.
- B. Cut panels at penetrations, edges, and other obstructions of work; fit tightly against abutting construction unless otherwise indicated.
- C. Securely attach to substrate by fastening as indicated, complying with the following:
 - 1. Table 2304.9.1, "Fastening Schedule," in the ICC's International Building Code.
 - 2. Table R602.3(1), "Fastener Schedule for Structural Members," and Table R602.3(2), "Alternate Attachments," in the ICC's International Residential Code for One- and Two-Family Dwellings.
 - 3. ICC-ES evaluation report for fastener.
- D. Coordinate wall and roof sheathing installation with flashing and joint-sealant installation so these materials are installed in sequence and manner that prevent exterior moisture from passing through completed assembly.
- E. Do not bridge building expansion joints; cut and space edges of panels to match spacing of structural support elements.
- F. Coordinate sheathing installation with installation of materials installed over sheathing so sheathing is not exposed to precipitation or let exposed at end of the workday when rain is forecasted.

3.2 CEMENTITIOUS BACKER UNIT INSTALLATION

- A. Install panels and treat joints according to ANSI A108.11 and manufacturer's written instructions for type of application indicated.

END OF SECTION 06 1600

**SECTION 06 2023
INTERIOR FINISH CARPENTRY**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Interior trim.
 - 2. Shelving.
- B. **RELATED DOCUMENTS:**
 - 1. **ALTERNATE 1:** Section 00 7316 Build America, Buy America (BABA) Requirements

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of process and factory-fabricated product.
- B. Samples: For each exposed product and for each color and texture specified.
- C. **ALTERNATE 1:** The Contractor shall submit the following documentation for each article, material or supply that must meet the BABA requirements:
 - 1. A certificate from the manufacturer or reseller that the product complies.
 - 2. For products that cost less than \$100 per product, a copy of the label that indicates the product was made in the United States is acceptable to HUD.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

- A. Lumber: DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated, comply with applicable rules of any rules-writing agency certified by the American Lumber Standard Committee's (ALSC) Board of Review. Grade lumber by an agency certified by the ALSC's Board of Review to inspect and grade lumber under the rules indicated.
 - 1. Factory mark each piece of lumber with grade stamp of grading agency.
 - 2. For exposed lumber, mark grade stamp on end or back of each piece.
- B. Softwood Plywood: DOC PS 1.
- C. Hardboard: ANSI A135.4.
- D. Melamine-Faced Particleboard: Particleboard complying with ANSI A208.1, Grade M-2, finished on both faces with thermally fused, melamine-impregnated decorative paper and complying with NEMA LD 3, Grade VGL, for Test Methods 3.3, 3.4, 3.6, 3.8, and 3.10.
 - 1. Color: As selected by Architect from manufacturer's full range

2.2 INTERIOR TRIM

- A. Lumber Trim for Opaque Finish (Painted Finish):
 - 1. Species and Grade: Match exiting.
 - 2. Maximum Moisture Content: 15 percent with at least 85 percent of shipment at 12 percent or less].
 - 3. Maximum Moisture Content: 13 percent.
 - 4. Finger Jointing: Not allowed.
 - 5. Face Surface: Surfaced (smooth).

2.3 SHELVING AND CLOTHES RODS

- A. Exposed, Closet, and Utility Shelving: Made from the following material, 3/4 inch thick:
 - 1. Utility Areas to have MDF with solid-wood front edge.
 - 2. Exposed and Closets to have Wood boards as specified above for hardwood lumber trim for transparent finish.
- B. Shelf Cleats: 3/4-by-5-1/2-inch boards with hole and notch to receive clothes rods] as specified above for shelving.
- C. Shelf Brackets with Rod Support: BHMA A156.16, B04051; prime-painted formed steel. Field painted to match wall.
- D. Shelf Brackets without Rod Support: BHMA A156.16, B04041; prime-painted formed steel. Field painted to match wall.

- E. Standards for Adjustable Shelf Brackets: BHMA A156.9, B04102; powder-coat-finished steel. Color: To be selected by Architect.
- F. Adjustable Shelf Brackets: BHMA A156.9, B04112; powder-coat-finished. Color: To be selected by Architect.
- G. Standards for Adjustable Shelf Supports: BHMA A156.9, B04071; powder-coat-finished steel. Color: To be selected by Architect.
- H. Adjustable Shelf Supports: BHMA A156.9, B04081 or B04091; powder-coat-finished steel. Color: To be selected by Architect.

2.4 MISCELLANEOUS MATERIALS

- A. Fasteners for Interior Finish Carpentry: Nails, screws, and other anchoring devices of type, size, material, and finish required for application indicated to provide secure attachment, concealed where possible.
- B. Low-Emitting Materials: Adhesives shall comply with testing and product requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."

PART 3 - EXECUTION

3.1 PREPARATION

- A. Clean substrates of projections and substances detrimental to application.
- B. Before installing interior finish carpentry, condition materials to average prevailing humidity in installation areas for a minimum of 24 hours, unless longer conditioning is recommended by manufacturer.

3.2 INSTALLATION, GENERAL

- A. Install interior finish carpentry level, plumb, true, and aligned with adjacent materials.
 1. Use concealed shims where necessary for alignment.
 2. Scribe and cut interior finish carpentry to fit adjoining work. Refinish and seal cuts as recommended by manufacturer.
 3. Where face fastening is unavoidable, countersink fasteners, fill surface flush, and sand unless otherwise indicated.
 4. Install to tolerance of 1/8 inch in 96 inches for level and plumb. Install adjoining interior finish carpentry with 1/32-inch maximum offset for flush installation and 1/16-inch maximum offset for reveal installation.
 5. Coordinate interior finish carpentry with materials and systems in or adjacent to it. Provide cutouts for mechanical and electrical items that penetrate interior finish carpentry.

3.3 STANDING AND RUNNING TRIM INSTALLATION

- A. Install trim with minimum number of joints as is practical, using full-length pieces from maximum lengths of lumber available.
 1. Do not use pieces less than 24 inches long.
 2. Stagger joints in adjacent and related standing and running trim.
 3. Match existing corners at returns, miter at outside corners, and cope at inside corners to produce tight-fitting joints with full-surface contact throughout length of joint.
 4. Use scarf joints for end-to-end joints.
 5. Plane backs of casings to provide uniform thickness across joints where necessary for alignment.
 6. Match color and grain pattern of trim for transparent finish (stain or clear finish) across joints.
 7. Install trim after gypsum-board joint finishing operations are completed.
 8. Install without splitting; drill pilot holes before fastening where necessary to prevent splitting.
 9. Fasten to prevent movement or warping.
 10. Countersink fastener heads on exposed carpentry work and fill holes.

3.4 SHELVING INSTALLATION

- A. Cut shelf cleats at ends of shelves about 1/2 inch less than width of shelves and sand exposed ends smooth.
 - 1. Install shelf cleats by fastening to framing or backing with finish nails or trim screws, set below face, and filled.
 - 2. Space fasteners not more than 16 inches o.c. Use two fasteners at each framing member or fastener location for cleats 4 inches nominal in width and wider.
 - 3. Apply a bead of multipurpose construction adhesive to back of shelf cleats before installing.
 - 4. Remove adhesive that is squeezed out after fastening shelf cleats in place.
- B. Install shelf brackets according to manufacturer's written instructions, spaced not more than 32 inches o.c. Fasten to framing members, blocking, or metal backing, or use toggle bolts or hollow wall anchors.
- C. Install standards for adjustable shelf supports according to manufacturer's written instructions. Fasten to framing members, blocking, or metal backing, or use toggle bolts or hollow wall anchors. Space fasteners not more than 12 inches o.c.
- D. Install standards for adjustable shelf brackets according to manufacturer's written instructions, spaced not more than 36 inches o.c. and within 6 inches of ends of shelves. Fasten to framing members, blocking, or metal backing, or use toggle bolts or hollow wall anchors.
- E. Cut shelves to neatly fit openings with only enough gap to allow shelves to be removed and reinstalled.
 - 1. Install shelves, fully seated on cleats, brackets, and supports.
 - 2. Fasten shelves to cleats with finish nails or trim screws, set flush.
 - 3. Fasten shelves to brackets to comply with bracket manufacturer's written instructions.

END OF SECTION 06 2023

**SECTION 06 6400
PLASTIC PANELING**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes plastic sheet paneling.
- B. **RELATED DOCUMENTS:**
 - 1. **ALTERNATE 1:** Section 00 7316 Build America, Buy America (BABA) Requirements

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For plastic paneling and trim accessories.
- C. **ALTERNATE 1:** The Contractor shall submit the following documentation for each article, material or supply that must meet the BABA requirements:
 - 1. A certificate from the manufacturer or reseller that the product complies.
 - 2. For products that cost less than \$100 per product, a copy of the label that indicates the product was made in the United States is acceptable to HUD.

1.3 QUALITY ASSURANCE

- A. Testing Agency: Acceptable to authorities having jurisdiction.

PART 2 - PRODUCTS

2.1 PLASTIC SHEET PANELING

- A. Glass-Fiber-Reinforced Plastic Paneling: Gelcoat-finished, glass-fiber-reinforced plastic panels complying with ASTM D 5319. Products with flame-spread index of 25 or less are readily available and are usually designated Class A. Most other products have flame-spread index of 200 or less and are designated Class C.
 - 1. Surface-Burning Characteristics: As follows when tested by a qualified testing agency according to ASTM E 84. Identify products with appropriate markings of applicable testing agency.
 - a. Flame-Spread Index: 25 or less.
 - b. Smoke-Developed Index: 450 or less.
 - 2. Nominal Thickness: Not less than 0.075 inch
 - 3. Surface Finish: As selected by Architect from manufacturer's full range.
 - 4. Color: As selected by Architect from manufacturer's full range.

2.2 ACCESSORIES

- A. Trim Accessories: Manufacturer's standard one-piece vinyl extrusions designed to retain and cover edges of panels. Provide division bars, inside corners, and caps as needed to conceal edges. Color: As selected by Architect from manufacturer's full range.
- B. Sealant: Mildew-resistant, single-component, neutral-curing silicone sealant recommended by plastic paneling manufacturer and complying with requirements in Section 07 9200 - "Joint Sealants."

PART 3 - EXECUTION

3.1 PREPARATION

- A. Clean substrates of substances that could impair adhesive bond, including oil, grease, dirt, and dust.
- B. Condition panels by unpacking and placing in installation space before installation according to manufacturer's written recommendations.
- C. Lay out paneling before installing. Locate panel joints where indicated.

3.2 INSTALLATION

- A. Install plastic paneling according to manufacturer's written instructions.
- B. Install panels in a full spread of adhesive.

- C. Install trim accessories with adhesive.
- D. Fill grooves in trim accessories with sealant before installing panels, and bed inside corner trim in a bead of sealant.
- E. Maintain uniform space between panels and wall fixtures. Fill space with sealant.
- F. Remove excess sealant and smears as paneling is installed. Clean with solvent recommended by sealant manufacturer and then wipe with clean dry cloths until no residue remains

END OF SECTION 06 6400

SECTION 07 0500
BASIC MATERIALS AND METHODS: THERMAL AND MOISTURE PROTECTION

PART 1 GENERAL

1.1 SUMMARY

- A. This Section includes basic requirements for subsequent Division 07 Specification Sections.
- B. **RELATED DOCUMENTS:**
ALTERNATE 1: Section 00 7316 Build America, Buy America (BABA) Requirements

1.2 QUALITY ASSURANCE

- A. General: Section 01 4000 – Quality Requirements.
- B. Installer Qualifications: Engage only qualified installers to perform work. Refer to subsequent Division 07 Sections for more specific requirements.
- C. Regulatory Requirements: Comply with requirements of authorities having jurisdiction related to the following:
 - 1. Fire and wind resistance of products and assemblies.
- D. Source Limitation: Obtain each type of specified product from a single qualified manufacturer and distribution source.
- E. Pre-Construction Conferences. Conduct pre-construction conferences for coordinating trade contractors whose work will interface with or be affected by work in this Division.

1.3 COORDINATION

- A. Provide openings for equipment and accessories that will be installed by other trades. When indicated on the Drawings, provide supplementary structural reinforcement at openings to accommodate imposed loads.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Comply with manufacturer's delivery, storage, and handling information.
- B. Establish proper storage conditions at shops, the site, and other points of delivery to prevent loss, deterioration, damage, and theft.
 - 1. Provide temporary heat and humidity control if required to achieve the conditions required by referenced standards.
 - 2. Store products in accordance with referenced standards to prevent puncture, detrimental exposure to sunlight and inclement weather, condensation, and other incidental damage at the site.
- C. Inspect and inventory products upon delivery. Reject defective or damaged products and promptly remove them from the Site.

PART 2 PRODUCTS

2.1 PRODUCTS, GENERAL

- A. Refer to Section 01 6000 – Product Requirements and subsequent Division 07 Sections.

PART 3 EXECUTION

3.1 EXECUTION, GENERAL

- A. Refer to Section 01 7000 – Execution Requirements.

3.2 INSPECTION

- A. Verify acceptability of substrate conditions in accordance with referenced standards and manufacturer's instructions. Correct non-complying conditions, including removal of interfering elements, restoration of substrates, and installation of supplementary framing, blocking, and supports. Do not proceed with installation until conditions are correct in accordance with referenced standards and product installation requirements.

3.3 PREPARATION

- A. Isolate components to prevent contact with incompatible substrates, including dissimilar metals to prevent galvanic reaction.
- B. Flash openings to prevent the intrusion of water into the building.

3.4 INSTALLATION

- A. Install products in accordance with the Drawings, manufacturer's recommendations, and approved shop drawings to result in weathertight installations.

END OF SECTION 07 0500

**SECTION 07 1416
FLUID-APPLIED WATERPROOFING**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
1. Elastomeric waterproofing.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
1. Include construction details, material descriptions, and tested physical and performance properties of waterproofing.
 2. Include manufacturer's written instructions for evaluating, preparing, and treating substrate.
- B. **ALTERNATE 1:** The Contractor shall submit the following documentation for each article, material or supply that must meet the BABA requirements:
1. A certificate from the manufacturer or reseller that the product complies.
 2. For products that cost less than \$100 per product, a copy of the label that indicates the product was made in the United States is acceptable to HUD.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by waterproofing manufacturer.

1.4 WARRANTY

- A. Manufacturer's Special Warranty: Manufacturer agrees to repair or replace waterproofing that fails in materials or workmanship within specified warranty period.
1. Warranty Period: 5 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 SINGLE-COMPONENT READY-TO-USE ELASTOMERIC MEMBRANE

- A. Single-Component, Ready-to-Use Elastomeric Membrane
1. Basis of Design: Lanco Aqua-Proof Prep

2.2 AUXILIARY MATERIALS

- A. Primer: Manufacturer's standard primer, sealer, or surface conditioner; factory-formulated.
- B. Membrane-Reinforcing Fabric: Manufacturer's recommended fiberglass mesh or polyester fabric.
- C. Joint Reinforcing Strip: Manufacturer's recommended fiberglass mesh or polyester fabric.
- D. Joint Sealant: Multicomponent polyurethane sealant, compatible with waterproofing; and as recommended by manufacturer for substrate and joint conditions.
1. Backer Rod: Closed-cell polyethylene foam.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Clean, prepare, and treat substrates according to manufacturer's written instructions. Provide clean, dust-free, and dry substrates for waterproofing application.
- B. Mask off adjoining surfaces not receiving waterproofing to prevent spillage and overspray affecting other construction.
- C. Close off deck drains and other deck penetrations to prevent spillage and migration of waterproofing fluids.
- D. Remove grease, oil, bitumen, form-release agents, paints, curing compounds, acid residues, and other penetrating contaminants or film-forming coatings from concrete.
- E. Remove fins, ridges, and other projections, and fill honeycomb, aggregate pockets, holes, and other voids.

- F. Prepare surfaces at terminations and penetrations through waterproofing and at expansion joints, drains, sleeves, and corners according to waterproofing manufacturer's written instructions and to recommendations in ASTM C 898/C 898M
- G. Apply waterproofing in two separate applications, and embed a joint reinforcing strip in the first preparation coat when recommended by waterproofing manufacturer.
- H. Prepare, treat, rout, and fill joints and cracks in substrate according to waterproofing manufacturer's written instructions and to recommendations in ASTM C 898/C 898M. Before coating surfaces, remove dust and dirt from joints and cracks according to ASTM D 4258.
- I. Install sheet flashing and bond to deck and wall substrates where required according to waterproofing manufacturer's written instructions.

3.2 WATERPROOFING APPLICATION

- A. Apply waterproofing according to manufacturer's written instructions and to recommendations in ASTM C 898/C 898M
- B. Reinforced Waterproofing Applications.
 - 1. Apply first coat of waterproofing, embed membrane-reinforcing fabric, and apply second coat of waterproofing to completely saturate reinforcing fabric and to obtain a seamless reinforced membrane free of entrapped gases and pinholes, with an average dry film total thickness of 70 mils (1.8 mm)
- C. Install protection course with butted joints over waterproofing before starting subsequent construction operations.
 - 1. For horizontal applications, install protection course loose laid over fully cured membrane.
 - 2. For vertical applications, set protection course in nominally cured membrane, which will act as an adhesive. If membrane cures before application of protection course, use adhesive.
 - 3. [Molded-sheet drainage panels may be used in place of a separate protection course for vertical applications when approved in writing by waterproofing manufacturer.

3.3 PROTECTION

- A. Do not permit foot or vehicular traffic on unprotected membrane.
- B. Protect waterproofing from damage and wear during remainder of construction period.
- C. Correct deficiencies in or remove waterproofing that does not comply with requirements; repair substrates, reapply waterproofing, and repair sheet flashings.

END OF SECTION 07 1416

**SECTION 07 9200
JOINT SEALANTS**

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Joint backing and sealants.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 07 5320 - Thermoset Single-Ply Sheet Roofing
- B. Section 07 6200 - Sheet Metal Flashing and Trim
- C. **ALTERNATE 1:** Section 00 7316 – Build America, Buy America (BABA) Requirements

1.3 ACTION SUBMITTALS

- A. Product Data: For each joint-sealant product indicated.
- B. Samples for Initial Selection: Manufacturer's color charts consisting of strips of cured sealants showing the full range of colors available for each product exposed to view.
- C. **ALTERNATE 1:** The Contractor shall submit the following documentation for each article, material or supply that must meet the BABA requirements:
 - 1. A certificate from the manufacturer or reseller that the product complies.
 - 2. For products that cost less than \$100 per product, a copy of the label that indicates the product was made in the United States is acceptable to HUD.

1.4 CLOSEOUT SUBMITTALS

- A. Warranties: Special warranties specified in this Section.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized Installer who is approved or licensed for installation of elastomeric sealants required for this Project.
- B. Source Limitations: Obtain each type of joint sealant through one source from a single manufacturer.

1.6 WARRANTY

- A. Manufacturer's written agreement to furnish elastomeric joint sealants to repair or replace those that do not comply with performance and other requirements specified in this Section within specified warranty period.
 - 1. Warranty Period: 5 years from Project Completion Date.

PART 2 - PRODUCTS

2.1 PRODUCTS AND MANUFACTURERS

- A. Products: Subject to compliance with requirements, provide one of the products indicated for each type in the Schedule at the end of Part 3.

2.2 PERFORMANCE REQUIREMENTS

- A. Provide elastomeric joint sealants that establish and maintain watertight and airtight continuous joint seals without staining or deteriorating joint substrates.

2.3 MATERIALS, GENERAL

- A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer, based on testing and field experience.
- B. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range.

2.4 ELASTOMERIC JOINT SEALANTS

- A. Elastomeric Sealants: Comply with ASTM C 920 and other requirements indicated for each liquid-applied chemically curing sealant specified, including classifications for type, grade, class, and uses related to exposure and joint substrates.
- B. Stain-Test-Response Characteristics: Sealants shall be tested according to ASTM C 1248.
- C. Suitability for Immersion in Liquids. Comply with ASTM C 1247 and qualify for the length of exposure indicated by reference to ASTM C 920 for Class 1 or 2. Liquid used for testing sealants is deionized water, unless otherwise indicated.

2.5 JOINT-SEALANT BACKING

- A. General: Provide sealant backings of material and type that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.
- B. Cylindrical Sealant Backings: ASTM C 1330, Type C (closed-cell material with a surface skin), and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance:
- C. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer. Provide self-adhesive tape where applicable.

2.6 MISCELLANEOUS MATERIALS

- A. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated.
- B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent surfaces.
- C. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

PART 3 - EXECUTION

3.1 PROJECT CONDITIONS

- A. Do not proceed with installation of joint sealants under the following conditions:
 - 1. When ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer or are below 40 deg F.
 - 2. When joint substrates are wet.
 - 3. Where joint widths are less than those allowed by joint-sealant manufacturer for applications indicated.
 - 4. Contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

3.2 PREPARATION

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions and the following requirements:
 - 1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer), old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.
 - 2. Clean porous joint substrate surfaces by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air. Porous joint substrates include the following:
 - a. Concrete.
 - b. Masonry.
 - c. Unglazed surfaces of ceramic tile.
 - 3. Remove laitance and form-release agents from concrete.

4. Clean nonporous surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants. Nonporous joint substrates include the following:
 - a. Metal.
 - b. Glass.
 - c. Glazed surfaces of ceramic tile.
- B. Joint Priming: Prime joint substrates, where recommended in writing by joint-sealant manufacturer, based on preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.
- C. Masking Tape: Use masking tape where required to prevent contact of sealant with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

3.3 INSTALLATION OF JOINT SEALANTS

- A. General: Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.
- B. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- C. Acoustical Sealant Application Standard: Comply with recommendations in ASTM C 919 for use of joint sealants in acoustical applications as applicable to materials, applications, and conditions indicated.
- D. Install sealant backings of type indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
 1. Do not leave gaps between ends of sealant backings.
 2. Do not stretch, twist, puncture, or tear sealant backings.
 3. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.
- E. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.
- F. Install sealants using proven techniques that comply with the following and at the same time backings are installed:
 1. Place sealants so they directly contact and fully wet joint substrates.
 2. Completely fill recesses in each joint configuration.
 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- G. Tooling of Nonsag Sealants: Tool sealants according to requirements specified below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.
 1. Remove excess sealant from surfaces adjacent to joints.
 2. Provide concave joint configuration per Figure 5A in ASTM C 1193, unless otherwise indicated.

3.4 CLEANING

- A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants.

3.5 PROTECTION

- A. Protect joint sealants during and after curing period so sealants are without deterioration or damage at time of Substantial Completion.
- B. Cut out and remove damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from original work.

3.6 JOINT-SEALANT SCHEDULE

- A. Type 1 - General Purpose Interior Sealant: Acrylic emulsion latex; ASTM C 834, Type OP, Grade NF single component, paintable.
1. Manufacturers/Product:
 - a. Tremco Tremflex 834
 - b. Sonneborn Building Products Sonolac
 - c. Pecora Corporation AC-20 + Silicone
 - d. BondaFlex Sil 150
 2. Applications
 - a. Non-traffic interior locations.
 - b. Interior perimeter of window and door frames and elevator entrances.
 - c. Control and construction joints.
 - d. Miscellaneous openings and penetrations.
 - e. Joints between dissimilar materials.
 - f. Interior wall and ceiling control joints.
 - g. Interior joints between door and window frames and wall surfaces.
 - h. Perimeter joints between interior wall surfaces and frames of interior doors, windows, storefronts, and similar openings.
 - i. Other interior joints for which no other type of sealant is indicated.
 - j. Other joints as indicated.
 3. Comply with ASTM C 834, Type P, Grade NF.
- B. Type 2 (Multi-Component Nonsag Urethane Sealant)
1. Manufacturer/Product:
 - a. Mameco Vulekem 227
 - b. Pecora Corporation Dynaflex
 - c. Sonneborn NP2
 - d. BondaFlex Bondaflex PUR 2 NS
 - e. Sika Corporation, Inc. Sika-Flex-2cNS TG
 2. Applications:
 - a. Interior and exterior applications subject to traffic.
 - b. Control, expansion and isolation joints in cast-in-place concrete.
 - c. Joints between architectural precast concrete paving units.
 - d. Tile control and expansion joints.
 - e. Joints between different materials listed above.
 - f. Other interior and exterior traffic bearing joints in horizontal and sloped traffic surfaces
- C. Type 3 (Single-Component Mildew-Resistant Acid Curing Silicon Sealant)
1. Manufacturer/Product:
 - a. Dow Corning 786 Mildew Resistant
 - b. GE Silicones Sanitary SCS 1700
 - c. Pecora Corporation 898 Silicone Sanitary Sealant
 - d. Tremco Tremsil 200 [white][clear]
 - e. Bondaflex Technologies Sil 100 GP
 2. Applications:
 - a. Perimeter of all plumbing fixtures and adjoining walls, floors and counters.
 - b. All countertop backsplashes/all interfaces where a sink is located in the countertop.
 - c. Piping which penetrates wall and is exposed to view.

END OF SECTION 07 9200

**SECTION 09 0500
BASIC MATERIALS AND METHODS: FINISHES**

PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including the Conditions of the Contract and Division 01 Specification Sections, apply to this Section.
- B. **ALTERNATE 1**: Section 00 7316 Build America, Buy America (BABA) Requirements

1.2 SUMMARY

- A. This Section includes general requirements for performance of finishes work in accordance with the Contract Documents.

1.3 REFERENCES

- A. Comply with applicable provisions of standards referenced, edition in effect as of date of Contract, unless more stringent requirements are required by governing codes, laws, and ordinances, or other Specification Sections.

1.4 SUBMITTALS

- A. General: Refer to Section 01 3300 – Submittal Procedures: For submittal requirements.
- B. Samples: Submit samples in accordance with requirements of each Section. Submit in sufficient size and quantity to demonstrate normal variations in color and texture, and as follows:
 - 1. Samples for Selection Purposes.
 - 2. Samples for Verification Purposes.
 - 3. Samples to demonstrate proper matching characteristics.
- C. Maintenance Instructions for installed products: Submit at Contract closeout.

1.5 QUALITY REQUIREMENTS

- A. Source Limitations: Ensure that each type of product is produced by a single manufacturer and obtained through distribution sources authorized by the manufacturer of each product required, unless otherwise approved by the Architect.
- B. Representative Construction: Construct mock-ups and field samples in accordance with the requirements of applicable Sections.

PART 2 PRODUCTS

2.1 PRODUCTS, GENERAL

- A. Refer to Section 01 6000 – Product Requirements and subsequent Division 09 Sections.

PART 3 EXECUTION

3.1 EXECUTION, GENERAL

- A. Refer to Section 01 7300 – Execution Requirements and subsequent Division 09 Sections.

3.2 EXAMINATION

- A. Review the condition of the area of installation and verify that it is acceptable in accordance with the product manufacturer's instructions, referenced standards, and accepted trade practices. Report unfavorable conditions in writing to the Architect. Do not allow installation to proceed until all unsatisfactory conditions have been corrected. Commencing work in an area will be considered acceptance of the existing conditions by that Installer and the Contractor shall assume all responsibility therefore.
- B. Test substrates in accordance with specified testing procedures specified in subsequent Sections and as recommended by manufacturers.

3.3 PREPARATION

- A. Prepare materials for installation in accordance with referenced industry standards, manufacturer's instructions, and accepted trade practices. In exposed or finish work, mix or

arrange materials for uniform blending and optimum arrangement according to the Architect's instructions.

- B. Lay out work in advance to ensure accurate spacing of surface patterns with uniform joint thicknesses and for accurate location of openings, joints, returns, and offsets.
- C. Furnish items to be installed or built into work performed by other trades according to the project schedule so as not to cause delays.
- D. Surface Preparation:
 - 1. Furnish, install, maintain, and remove all necessary temporary protections to safeguard persons and property in the vicinity of the surface preparation area prior to commencement of surface preparation procedures, including but not limited to protection of HVAC system and existing adjacent construction.
 - 2. Prepare surfaces to receive work in accordance with manufacturer's instructions, referenced standards and accepted trade practices.
 - 3. Test substrates according to standard industry practices approved by the manufacturer of the components to be installed. Perform additional testing as recommended by the manufacturer.

3.4 EXECUTION, GENERAL

- A. All work identified in the Contract Documents shall be performed by skilled and, where applicable, by licensed installers. Where indicated in the Contract Documents, installers shall be approved by the manufacturer for installing the materials in the manner indicated.
- B. The Work shall be installed, applied, or erected in accordance with recognized trade practices, unless more stringent installation requirements are described in the Contract Documents or in the approved manufacturer's published installation instructions. For materials or systems that are specified to receive warranties, work shall comply with the requirements of the manufacturer.
- C. Perform all cutting and patching required for full execution of the work. Patching of finished materials shall be performed by skilled installers in a manner that fully restores the finished work to a condition acceptable to the Architect.
- D. Construct work to the full elevations, widths, and thicknesses shown.

3.5 INSPECTION

- A. When required by authorities having jurisdiction over the Project, the Contractor shall schedule and oversee inspections and testing of the installed work and respond to all recommendations that arise therefrom.
- B. When review and inspection of work by a manufacturer representative is a condition of a special project warranty, the Contractor shall schedule and oversee such reviews and inspections and respond to all recommendations that arise therefrom.

3.6 CLEANING

- A. Progress Cleaning: As the Work progresses, the Contractor shall ensure that installed products are cleaned in accordance with the recommendations of the product manufacturer, referenced standards, and accepted trade practices.

3.7 FINISHING

- A. Finish surfaces of installed work that are not pre-finished by the manufacturer or fabricator, including but not limited to metal, wood, and cementitious elements.
 - 1. Finishing includes, as applicable, sealing joints between frames and substrates, surface preparation, priming and painting or staining and sealing in accordance with the manufacturer's recommendations and the Owner's finish scheme.
 - 2. Final color and sheen will be selected by the Architect.
 - 3. Do not conceal or paint over labels or tags required by authorities having jurisdiction when performing finish work.
 - 4. Refer to Section 09 9000 for additional finishing requirements.
- B. Back-prime and weather-proof components installed as part of building shell construction.

3.8 PROTECTION

- A. Provide necessary protections to ensure that installed products are without damage or undue deterioration as of the Project Completion Date. Upon final acceptance of the work, the remove temporary protections from the Project Site.

END OF SECTION 09 0500

**SECTION 09 0561
FLOORING PREPARATION**

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. This section applies to all floors identified in the Contract Documents to receive floor coverings.
- B. Remediation of concrete floor slabs due to unsatisfactory moisture or pH conditions.
 - 1. Perform all specified remediation of concrete floor slabs. If such remediation is indicated by testing agency's report and is due to a condition not under Contractor's control or could not have been predicted by examination prior to entering into the contract, a contract modification will be issued.

1.2 REFERENCES

- A. ASTM F710 - Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring; current edition.
- B. ASTM F1869 - Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride; current edition.
- C. **ALTERNATE 1:** Section 00 7316 Build America, Buy America (BABA) Requirements

1.3 ADMINISTRATIVE REQUIREMENTS

- A. Coordinate scheduling of cleaning and testing, so that preliminary cleaning has been completed for at least 24 hours prior to testing.

1.4 SUBMITTALS

- A. Floor Covering and Adhesive Manufacturers' Product Literature: For each specific combination of substrate, floor covering, and adhesive to be used; showing:
 - 1. Manufacturer's required bond / compatibility test procedure.
- B. Adhesive Bond and Compatibility Test Report.
- C. **ALTERNATE 1:** The Contractor shall submit the following documentation for each article, material or supply that must meet the BABA requirements:
 - 1. A certificate from the manufacturer or reseller that the product complies.
 - 2. For products that cost less than \$100 per product, a copy of the label that indicates the product was made in the United States is acceptable to HUD.

1.5 QUALITY ASSURANCE

- A. Contractor may perform moisture, adhesive and bond tests with his own personnel or hire a testing agency.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Patching Compound: Floor covering manufacturer's recommended product, suitable for conditions, and compatible with adhesive and floor covering. In the absence of any recommendation from flooring manufacturer, provide a product with the following characteristics:
 - 1. Cementitious moisture-, mildew-, and alkali-resistant compound, compatible with floor, floor covering, and floor covering adhesive, and capable of being feathered to nothing at edges.
 - 2. Latex or polyvinyl acetate additions are permitted; gypsum content is prohibited.
 - 3. Compressive Strength: 3000 psi, minimum, after 28 days, when tested in accordance with ASTM C109/C109M or ASTM C472, whichever is appropriate.
- B. Alternate Flooring Adhesive: Floor covering manufacturer's recommended product, suitable for the moisture and pH conditions present; low-VOC. In the absence of any recommendation from flooring manufacturer, provide a product recommended by adhesive manufacturer as suitable for substrate and floor covering and for conditions present.

- C. Remedial Floor Coating: Single- or multi-layer coating or coating/overlay combination designed to resist water vapor transmission to degree sufficient to meet flooring manufacturer's emission limits, resistant to the level of pH found, and suitable for adhesion of flooring without further treatment.
 - 1. Thickness: 1/8 inch, maximum per coat.

PART 3 - EXECUTION

3.1 CONCRETE SLAB PREPARATION

- A. Perform following operations in the order indicated:
 - 1. Preliminary cleaning.
 - 2. Moisture vapor emission tests; at least 1 test in each set (men's and women's) toilet room and coffee station, unless otherwise indicated or required by flooring manufacturer.
 - 3. Internal relative humidity tests; in same locations as moisture vapor emission tests, unless otherwise indicated.
 - 4. pH tests; in same locations as moisture vapor emission tests, unless otherwise indicated.
 - 5. Specified remediation, if required.
 - 6. Patching, smoothing, and leveling, as required.
 - 7. Other preparation specified.
 - 8. Adhesive bond and compatibility test.
 - 9. Protection.
- B. Remediations:
 - 1. Excessive Moisture Emission or Relative Humidity: If an adhesive that is resistant to the level of moisture present is available and acceptable to flooring manufacturer, use that adhesive for installation of the flooring; if not, apply remedial floor coating over entire suspect floor area.
 - 2. Excessive pH: If remedial floor coating is necessary to address excessive moisture, no additional remediation is required; if not, if an adhesive that is resistant to the level present is available and acceptable to the flooring manufacturer, use that adhesive for installation of the flooring; otherwise, apply a skim coat of specified patching compound over entire suspect floor area.

3.2 PRELIMINARY CLEANING

- A. Remove dust, solvents, paint, wax, oil, grease, asphalt, residual adhesive, adhesive removers, film-forming curing compounds, sealing compounds, alkaline salts, excessive laitance, mold, mildew, and other materials that might prevent adhesive bond.
- B. Do not use solvents or other chemicals for cleaning.

3.3 MOISTURE VAPOR EMISSION TESTING

- A. Where the floor covering manufacturer's requirements conflict with either the referenced test method or this specification, comply with the manufacturer's requirements.
- B. Test in accordance with ASTM F1869 and as follows.
 - 1. Plastic sheet test and mat bond test may not be substituted for the specified ASTM test method, as those methods do not quantify the moisture content sufficiently.
- C. In the event that test values exceed floor covering manufacturer's limits, perform remediation as indicated. In the absence of manufacturer limits, perform remediation if test values exceed 3 pounds per 1000 square feet per 24 hours.
- D. Report: Report the information required by the test method.

3.4 PH TESTING

- A. Where the floor covering manufacturer's requirements conflict with either the referenced test method or this specification, comply with the manufacturer's requirements.
- B. Note: This procedure is the equivalent of that described in ASTM F710, repeated here for the Contractor's convenience.
- C. Use a wide range pH paper, its associated chart, and distilled or deionized water.

- D. Place several drops of water on a clean surface of concrete, forming a puddle approximately 1 inch in diameter. Allow the puddle to set for approximately 60 seconds, then dip the pH paper into the water, remove it, and compare immediately to chart to determine pH reading.

3.5 PREPARATION

- A. See individual manufacture floor covering selection(s) for additional requirements.
- B. Comply with requirements and recommendations of floor covering manufacturer.
- C. Fill and smooth surface cracks, grooves, depressions, control joints and other non-moving joints, and other irregularities with patching compound.
- D. Do not fill expansion joints, isolation joints, or other moving joints.
- E. See drawings for built up area of floor at dissimilar products.

3.6 ADHESIVE BOND AND COMPATIBILITY TESTING

- A. Comply with requirements and recommendations of floor covering manufacturer.

3.7 APPLICATION OF REMEDIAL FLOOR COATING

- A. Comply with requirements and recommendations of coating manufacturer.

3.8 PROTECTION

- A. Cover prepared floors with building paper or other durable covering.

END OF SECTION 09 0561

**SECTION 09 6500
RESILIENT FLOORING**

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Resilient sheet flooring.
- B. Resilient base.
- C. Installation accessories.

1.2 RELATED REQUIREMENTS

- A. Section 09 0561 - Flooring Preparation: Independent agency testing of concrete slabs, removal of existing floor coverings, cleaning, and preparation.
- B. **ALTERNATE 1:** Section 00 7316 – Build America, Buy America (BABA) Requirements

1.3 REFERENCE STANDARDS

- A. ASTM E648 - Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source.
- B. ASTM F710 - Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring.
- C. ASTM F1066 - Standard Specification for Vinyl Composition Floor Tile.
- D. ASTM F1344 - Standard Specification for Rubber Floor Tile.
- E. ASTM F1861 - Standard Specification for Resilient Wall Base.
- F. ASTM F2034 - Standard Specification for Sheet Linoleum Floor Covering.
- G. FS RR-T-650 - Treads, Metallic and Nonmetallic, Skid Resistant; Federal Specifications and Standards.
- H. RFCI - Recommended Work Practices for Removal of Resilient Floor Coverings; Resilient Floor Covering Institute.

1.4 SUBMITTALS

- A. Product Data: Provide data on specified products, describing physical and performance characteristics; including sizes, patterns and colors available; and installation instructions.
- B. Verification Samples: Submit two samples, 12 x 24 inch in size illustrating color and pattern for each resilient flooring product specified.
- C. Concrete Testing Standard: Submit a copy of ASTM F710.
- D. Certification: Prior to installation of flooring, submit written certification by flooring manufacturer and adhesive manufacturer that condition of sub-floor is acceptable.
- E. Maintenance Data: Include maintenance procedures, recommended maintenance materials, and suggested schedule for cleaning, stripping, and re-waxing.
- F. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
 - 1. See Section 01 6000 – “Product Requirements”, for additional provisions.
 - 2. Extra Flooring Material: 150 square feet of each type and color.
 - 3. Extra Wall Base: 50 linear feet of each type and color.
- G. **ALTERNATE 1:** The Contractor shall submit the following documentation for each article, material or supply that must meet the BABA requirements:
 - 1. A certificate from the manufacturer or reseller that the product complies.
 - 2. For products that cost less than \$100 per product, a copy of the label that indicates the product was made in the United States is acceptable to HUD.

1.5 QUALITY REQUIREMENTS

- A. Fire Performance Characteristics for resilient flooring and accessories: Critical Radiant Flux (CRF):
 - 1. Critical Radiant Flux: Minimum 0.45 watt per square centimeter when tested according to ASTM E 648 or NFPA 253.
- B. Coefficient of Friction for Flooring Surfaces: 0.6 or greater for level surfaces, 0.8 or greater for ramps or other inclined surfaces according to ADA.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Protect roll materials from damage by storing according to the manufacturer's recommendations.

1.7 FIELD CONDITIONS

- A. Maintain temperature in storage area between 55 degrees F and 80 degrees F.
- B. Store materials for not less than 48 hours prior to installation in area of installation at a temperature of 70 degrees F to achieve temperature stability. Thereafter, maintain conditions above 60 degrees F.
- C. Do not install tiles over concrete slabs until slabs have pH range recommended by flooring manufacturer. No condensation on underside of 4 foot by 4 foot polyethylene sheet within 48 hours, fully taped at perimeters. PH and moisture rates:
 - 1. PH range of 5 to 9.
 - 2. Moisture emission rate of 3 lb./1000 sq.ft. per 24 hours or less.
- D. Where slab moisture conditions do not meet the manufacturer's requirements and the conditions in 1.7 of this section take corrective measures; refer to section 2.

PART 2 - PRODUCTS

2.1 PRODUCTS, GENERAL

- A. Refer to the Finish Legend on the Drawings for selected flooring products, sizes, colors, and patterns required under this Section. No substitutions will be considered.

2.2 RESILIENT SHEET FLOORING

- A. Vinyl Sheet Flooring with backing: ASTM F1303 Type 1, Class 1, Grade A, Refer to the Finish Legend on the Drawings for selected products and colors required under this Section.
 - 1. Thickness: 0.0787 inch thick (2 mm).
 - 2. Finish: M-Force.
 - 3. Wear Layer: 20 mil (0.5 mm)
 - 4. Sheet Width: 6'-6"
 - 5. Adhesive: Follow manufacturer's recommendations.

2.3 RESILIENT BASE

- A. Resilient Base: ASTM F1861, Type TS rubber, vulcanized thermoset; top set Style B, Cove, Refer to the Finish Legend on the Drawings for selected base products, size, and colors required under this Section.
 - 1. Height: Refer to the Drawings.
 - 2. Thickness: 0.125 inch thick.
 - 3. Finish: Matte.
 - 4. Length: Rolls. 4' sections not permitted.
 - 5. Accessories: Factory pre-molded external corners and end stops.

2.4 ACCESSORIES

- A. Subfloor Filler: White premix latex; type recommended by adhesive material manufacturer.
- B. Primers, Adhesives, and Seaming Materials: Waterproof; types recommended by flooring manufacturer.
- C. Moldings, Transition and Edge Strips: Refer to the Finish Legend on the Drawings for pre-approved flooring products, sizes, colors, and patterns required under this Section.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that surfaces are flat to tolerances acceptable to flooring manufacturer, free of cracks that might telegraph through flooring, clean, dry, and free of curing compounds, surface hardeners, and other chemicals that might interfere with bonding of flooring to substrate.

- B. Verify that wall surfaces are smooth and flat within the tolerances specified for that type of work, are dust-free, and are ready to receive base.
- C. Cementitious Sub-floor Surfaces: Verify that substrates are dry and ready for resilient flooring installation by testing for moisture and pH.
 - 1. Test in accordance with Section 09 0561.
 - 2. Obtain instructions if test results are not within limits recommended by resilient flooring manufacturer and adhesive materials manufacturer.

3.2 PREPARATION

- A. Remove existing resilient flooring and flooring adhesives; follow the recommendations of RFCI Recommended Work Practices for Removal of Resilient Floor Coverings.
- B. Prepare floor substrates for installation of flooring in accordance with Section 09 0561.
- C. Remove sub-floor ridges and bumps. Fill minor low spots, cracks, joints, holes, and other defects with sub-floor filler to achieve smooth, flat, hard surface.
- D. Clean substrate.

3.3 INSTALLATION

- A. Starting installation constitutes acceptance of sub-floor conditions.
- B. Install in accordance with manufacturer's instructions.
- C. Spread only enough adhesive to permit installation of materials before initial set.
- D. Fit joints tightly.
- E. Set flooring in place, press with heavy roller to attain full adhesion.
- F. Where type of floor finish, pattern, or color are different on opposite sides of door, terminate flooring at transition strip under centerline of door.
- G. Install edge strips at unprotected or exposed edges, where flooring terminates, and where indicated.
 - 1. Metal Strips: Attach to substrate before installation of flooring using manufactures recompensated method.
 - 2. Resilient Strips: Attach to substrate using adhesive.
- H. Scribe flooring to walls, columns, cabinets, floor outlets, and other appurtenances to produce tight joints.

3.4 RESILIENT BASE

- A. Fit joints tightly and make vertical. Maintain minimum dimension of 18 inches between joints.
- B. Install base on solid backing. Bond tightly to wall and floor surfaces.
- C. Scribe and fit to door frames and other interruptions.

3.5 CLEANING

- A. Remove excess adhesive from floor, base, and wall surfaces without damage.
- B. Clean in accordance with manufacturer's instructions.
- C. Finishing in accordance with manufacturer's instructions.

3.6 PROTECTION: Prohibit traffic on flooring for 48 hours after installation.

END OF SECTION 09 6500

**SECTION 09 9000
PAINTING**

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Surface preparation.
- B. Field application of paints, stains, varnishes, and other coatings.
- C. Materials for back-priming woodwork.
- D. Scope: Finish all interior and exterior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated, including the following:
 - 1. All sides and edges of plywood backboards for electrical and telecom equipment before installing equipment.
 - 2. Mechanical and Electrical:
 - a. In all areas, paint all insulated and exposed pipes, conduit, boxes, insulated and exposed ducts, hangers, brackets, collars and supports, mechanical equipment, and electrical equipment, unless otherwise indicated.
 - b. In all areas, paint shop-primed items.
 - c. Paint interior surfaces of air ducts and convector and baseboard heating cabinets that are visible through grilles and louvers with one coat of flat black paint to visible surfaces.
 - d. Paint dampers exposed behind louvers, grilles, and convector and baseboard cabinets to match face panels.
- E. Do Not Paint or Finish the Following Items:
 - 1. Items fully factory-finished unless specifically so indicated; materials and products having factory-applied primers are not considered factory finished.
 - 2. Items indicated to receive other finishes.
 - 3. Items indicated to remain unfinished.
 - 4. Fire rating labels, equipment serial number and capacity labels, and operating parts of equipment.
 - 5. Stainless steel and anodized aluminum.
 - 6. Porcelain and other tiles.
 - 7. Acoustical materials, unless specifically so indicated.
 - 8. Concealed pipes, ducts, and conduits.

1.2 DEFINITIONS: Conform to ASTM D16 for interpretation of terms used in this section.

1.3 REFERENCE STANDARDS

- A. 40 CFR 59, Subpart D - National Volatile Organic Compound Emission Standards for Architectural Coatings; U.S. Environmental Protection Agency; current edition.
- B. ASTM D16 - Standard Terminology for Paint, Related Coatings, Materials, and Applications; 2012.
- C. ASTM D4442 - Standard Test Methods for Direct Moisture Content Measurement of Wood and Wood-Base Materials; 2007.
- D. **ALTERNATE 1:** Section 00 7316 – Build America, Buy America (BABA) Requirements

1.4 SUBMITTALS

- A. Product Data: Provide complete list of all products to be used, with the following information for each:
 - 1. Manufacturer's name, product name and/or catalog number, and general product category (e.g. "alkyd enamel").
 - 2. MPI product number (e.g. MPI #47).
 - 3. Cross-reference to specified paint system(s) product is to be used in; include description of each system.
 - 4. Manufacturer's installation instructions.

5. If proposal of substitutions is allowed under submittal procedures, explanation of all substitutions proposed.
- B. Samples: Submit three paper "drop" samples, 8-1/2 by 11 inches in size, illustrating range of colors available for each finishing product specified.
 1. Where sheen is specified, submit samples in only that sheen.
 2. Where sheen is not specified, discuss sheen options with Architect before preparing samples, to eliminate sheens definitely not required.
 3. Allow 30 days for approval process, after receipt of complete samples by Architect.
 4. Paint color submittals will not be considered until color submittals for major materials not to be painted, such as masonry, have been approved.
- C. Samples: Submit two paper chip samples, 3 x 3 inch in size illustrating range of colors and textures available for each surface finishing product scheduled.
- D. Certification: By manufacturer that all paints and coatings comply with VOC limits specified.
- E. Manufacturer's Instructions: Indicate special surface preparation procedures.
- F. Maintenance Data: Submit data on cleaning, touch-up, and repair of painted and coated surfaces.
- G. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
 1. See Section 01 6000 - Product Requirements, for additional provisions.
 2. Extra Paint and Coatings: 1 gallon of each color; store where directed.
 3. Label each container with color in addition to the manufacturer's label.
- H. **ALTERNATE 1:** The Contractor shall submit the following documentation for each article, material or supply that must meet the BABA requirements:
 1. A certificate from the manufacturer or reseller that the product complies.
 2. For products that cost less than \$100 per product, a copy of the label that indicates the product was made in the United States is acceptable to HUD.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified, with minimum three (3) years' experience.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.
- B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.
- C. Paint Materials: Store at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.

1.7 FIELD CONDITIONS

- A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.
- B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.
- C. Do not apply exterior coatings during rain or snow, or when relative humidity is outside the humidity ranges required by the paint product manufacturer.
- D. Minimum Application Temperatures for Latex Paints: 45 degrees F for interiors; 50 degrees F for exterior; unless required otherwise by manufacturer's instructions.
- E. Minimum Application Temperature for Varnish Finishes: 65 degrees F for interior or exterior, unless required otherwise by manufacturer's instructions.
- F. Provide lighting level of 80 ft candles measured mid-height at substrate surface.

1.8 EXTRA MATERIALS

- A. Supply a minimum of 1 gallon of each color; store where directed.
- B. Label each container with color in addition to the manufacturer's label.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Provide all paint and coating products used in any individual system from the same manufacturer; no exceptions.
- B. Provide all paint and coating products from the same manufacturer to the greatest extent possible.
 - 1. In the event that a single manufacturer cannot provide all specified products, minor exceptions will be permitted provided approval by Architect is obtained using the specified procedures for substitutions.
- C. Acceptable manufacturers:
 - 1. Sherwin Williams
 - 2. PPG
 - 3. Benjamin Moore

2.2 PAINTS AND COATINGS - GENERAL

- A. Paints and Coatings: Ready mixed, unless intended to be a field-catalyzed coating.
 - 1. Provide paints and coatings of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
 - 2. Provide materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
 - 3. For opaque finishes, tint each coat including primer coat and intermediate coats, one-half shade lighter than succeeding coat, with final finish coat as base color.
 - 4. Supply each coating material in quantity required to complete entire project's work from a single production run.
 - 5. Do not reduce, thin, or dilute coatings or add materials to coatings unless such procedure is specifically described in manufacturer's product instructions.
- B. Primers: Where the manufacturer offers options on primers for a particular substrate, use primer categorized as "best" by the manufacturer.
- C. Volatile Organic Compound (VOC) Content:
 - 1. Provide coatings that comply with the most stringent requirements specified in the following:
 - a. 40 CFR 59, Subpart D--National Volatile Organic Compound Emission Standards for Architectural Coatings.
 - b. Ozone Transport Commission (OTC) Model Rule, Architectural, Industrial, and Maintenance Coatings; www.otcair.org; specifically:
 - 1) Opaque, Flat: 50 g/L, maximum.
 - 2) Opaque, Nonflat: 150 g/L, maximum.
 - 3) Opaque, High Gloss: 250 g/L, maximum.
 - 4) Varnishes: 350 g/L, maximum.
 - 2. Determination of VOC Content: Testing and calculation in accordance with 40 CFR 59, Subpart D (EPA Method 24), exclusive of colorants added to a tint base and water added at project site; or other method acceptable to authorities having jurisdiction.
- D. Colors: As indicated on drawings and within finish schedules
 - 1. Selection to be made by Architect after award of contract.
 - 2. Extend colors to surface edges; colors may change at any edge as directed by Architect.
 - 3. In all areas, finish pipes, ducts, conduit, and equipment the same color as the wall/ceiling they are mounted on/under.
 - 4. In utility areas, finish equipment, piping, conduit, and exposed duct work in colors according to the color-coding scheme indicated.

2.3 PAINT SYSTEMS - EXTERIOR

- A. General: Unless specifically indicated, paint all unfinished surfaces exposed to weather elements, whether or not the surface is exposed to view.
- B. Paint ME-OP-3A - Ferrous Metals, Unprimed, Alkyd, 3 Coat:
 - 1. One coat of alkyd primer.
 - 2. Semi-gloss: Two coats of alkyd enamel; Color as selected by Architect.
- C. Paint MgE-OP-3A - Galvanized Metals, Alkyd, 3 Coat:
 - 1. One coat galvanize primer.
 - 2. Semi-gloss: Two coats of alkyd enamel; Color as selected by Architect.

2.4 PAINT SYSTEMS - INTERIOR

- A. Epoxy Coating Systems: Provide approved manufacturer's recommended epoxy coating systems for surfaces in the following locations:
 - 1. Janitor Closets.
 - 2. Toilet rooms
 - 3. Showers
 - 4. Pool areas, Spa, and Pool Equipment Room, Pool Storage
 - 5. Elevator pit walls up to 8 feet above finished First Floor, including the concrete floor. This system shall be bright white color.
- B. Paint I-OP - All Interior Surfaces Indicated to be Painted, Unless Otherwise Indicated: Including gypsum board, concrete, concrete masonry, brick, wood, plaster, uncoated steel, shop primed steel, galvanized steel, and aluminum.
 - 1. Two top coats and one coat primer.
 - 2. Top Coat(s): MPI Interior Latex; MPI #43, 44, 52, 53, 54, 114.
 - a. Provide epoxy intermediate and topcoats where indicated in 2.04 A above.
 - 3. Flat: MPI gloss level 1; use this sheen for ceilings and soffits, unless otherwise indicated.
 - 4. Eggshell: MPI gloss level 3; use this sheen for walls unless otherwise indicated.
 - 5. Satin: MPI gloss level 4; use this sheen for items subject to frequent touching by occupants, including door frames and railings.
 - 6. Semi-Gloss: MPI gloss level 5; use this sheen for epoxy systems.
 - 7. Top Coat Product(s):
 - a. Sherwin-Williams Pre-Catalyzed Waterbased Epoxy where indicated.
 - b. Sherwin-Williams Harmony Low Odor Interior Latex unless otherwise indicated.
 - 8. Primer(s): As follows unless other primer is required or recommended by manufacturer of top coats:
 - a. Gypsum Board: MPI #50, Interior Latex Primer Sealer.
 - b. Steel, Uncoated: MPI #79, Anti-Corrosive Alkyd Primer for Metal.
 - c. Steel -- Shop Primer: MPI #76, Quick Dry Alkyd Primer for Metal.
 - d. Galvanized Steel: MPI #134, Water Based Galvanized Primer.
 - e. Aluminum: MPI #95, Quick Dry Primer for Aluminum.
 - f. Epoxy primers: Provide epoxy primers appropriate for substrates indicated in areas specified in 2.04 A above.
- C. Paint I-OP-HD - Heavy Duty Vertical and Overhead: Including gypsum board, uncoated steel, shop primed steel, galvanized steel, and aluminum.
 - 1. Two top coats and one coat primer; primer may be omitted if top coat manufacturer approves.
 - 2. Primer(s): As recommended by manufacturer of top coats.
- D. Paint WI-TR-VS - Wood, Transparent, Varnish, Stain:
 - 1. One coat of stain.
 - 2. One coat of sealer.
 - 3. Satin: One coat of varnish.
- E. Paint MI-OP-3L - Ferrous Metals, Unprimed, Latex, 3 Coat:
 - 1. One coat of latex primer.
 - 2. Semi-gloss: Two coats of latex enamel; Color as selected by Architect.
- F. Paint MI-OP-2L - Ferrous Metals, Primed, Latex, 2 Coat:
 - 1. Touch-up with latex primer.

- G. Paint GI-OP-3A - Gypsum Board/Plaster, Alkyd, 3 Coat:
 - 1. One coat of alkyd primer sealer.
 - 2. Eggshell: Two coats of alkyd enamel. Color as selected by Architect
- H. Paint GI-OP-3L - Gypsum Board/Plaster, Latex, 3 Coat:
 - 1. One coat of alkyd primer sealer.
 - 2. Eggshell: Two coats of latex enamel; Color as selected by Architect.

2.5 ACCESSORY MATERIALS

- A. Accessory Materials: Provide all primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials required to achieve the finishes specified whether specifically indicated or not; commercial quality.
- B. Patching Material: Latex filler.
- C. Fastener Head Cover Material: Latex filler.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that surfaces are ready to receive work as instructed by the product manufacturer.
- B. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.
- C. Test shop-applied primer for compatibility with subsequent cover materials.
- D. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below the following maximums:
 - 1. Gypsum Wallboard: 12 percent.

3.2 PREPARATION

- A. Clean surfaces thoroughly and correct defects prior to coating application.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- C. Remove or repair existing coatings that exhibit surface defects.
- D. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces or finishing.
- E. Seal surfaces that might cause bleed through or staining of topcoat.
- F. Remove mildew from impervious surfaces by scrubbing with solution of tetra-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.
- G. Gypsum Board Surfaces to be Painted: Fill minor defects with filler compound. Spot prime defects after repair.
- H. Shop-Primed Steel Surfaces to be Finish Painted: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces.
- I. Interior Wood Surfaces to Receive Transparent Finish: Wipe off dust and grit prior to sealing, seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after sealer has dried; sand lightly between coats. Prime concealed surfaces with gloss varnish reduced 25 percent with thinner.
- J. Metal Doors to be Painted: Prime metal door top and bottom edge surfaces.

3.3 APPLICATION

- A. Remove unfinished louvers, grilles, covers, and access panels on mechanical and electrical components and paint separately.
- B. Apply products in accordance with manufacturer's instructions.
- C. Where adjacent sealant is to be painted, do not apply finish coats until sealant is applied.
- D. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
- E. Apply each coat to uniform appearance.
- F. Sand wood and metal surfaces lightly between coats to achieve required finish.

- G. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.
- H. Wood to Receive Transparent Finishes: Tint fillers to match wood. Work fillers into the grain before set. Wipe excess from surface.
- I. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

3.4 FIELD QUALITY CONTROL

- A. See Section 01 4000 - Quality Requirements, for general requirements for field inspection.

3.5 CLEANING

- A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.6 PROTECTION

- A. Protect finished coatings until completion of project.
- B. Touch-up damaged coatings after Substantial Completion.

END OF SECTION 09 9000

Exterior Paint Schedule

Requirement			Mils per coat (Wet/Dry)				Manufacturer										Finish		Notes	
Item	Substrate	Location	Primer		Finish		ICI		Pittsburg		Sherwin Williams		Benjamin Moore		Pratt & Lambert		Luster	Final Coats		
			w	D	W	D	Primer	2 Finish	Primer	2 Finish	Primer	2 Finish	Primer	2 Finish	Primer	2 Finish				
Ferrous Metals	Primer on Bare Metal	Stacks, Pipes, Beams, Misc Metals	6	3	5	3	ICI - Devooe-Devflex - 4020	ICI - Devooe - DevFlex -4216	94-258 Multi Prime	7-844 Alkyd Semi Gloss Enamel	KemKromik Metal Primer B50Z	Metalastic DTM B55Z Series	M06 Alkyd Metal Primer	M29 DTM Acrylic	S4501 Rust Inhibitive Metal Primer	Maint. Gloss S4500 Series	Semi gloss	Acrylic Enamel		
Factory Primed Steel	Factory Primed	Doors and Frames, Exposed Piping	-	3	-	3.25	Per the Manf.	Devflex High Performance 4216	90-709 Pitt-Tech Primer Finish DTM	90-474 Pitt-Tech High Performance Waterborne DTM Enamel	DTM Acrylic Primer/Finish	DTM Acrylic Semi-Gloss #B66-200	M29 DTM	M29 DTM	Enducryl DTM Z6600 Series	Enducryl DTM Z6600 Series	Semi gloss	Acrylic Enamel		
Galvanized Steel	Factory Galvanized	Lintels, frames, supports, steel beams, columns, etc	10	3.5	10	4	Devflex 4020 PF DTM Flat Primer/Finish	Devflex 4216 HP Acrylic Semi-Gloss Enamel	90-709 Pitt-Tech Primer Finish DTM	90-474 Pitt-Tech High Perf. Waterborne DTM Ind. Enamel	Sher-Cryl High Perf. Acrylic Pro-Cryl Univ. Primer	DTM Acrylic Semi-Gloss #B66-200	M29 DTM Acrylic	M29 DTM Acrylic Semi-Gloss	Steeltech Z6631 (Off White) Universal Primer	Enducryl Acrylic Semi-Gloss	Semi gloss	Acrylic Enamel		
Galvannealed Steel	Factory Galvannealed	HM Doors & frames any exposed metals, bollards, gates/post	10	3.5	10	4	Devflex 4020 PF DTM Flat Primer/Finish	Devflex 4216 HP Acrylic Semi-Gloss Enamel	90-709 Pitt-Tech Primer Finish DTM	90-474 Pitt-Tech High Perf. Waterborne DTM Ind. Enamel	Pro-Cryl Universal Primer	Sher-Cryl High Performance Acrylic Semi-Gloss	M29 DTM Acrylic	M29 DTM Acrylic Semi-Gloss	Steeltech Z6631 (Off White) Universal Primer	Enducryl Acrylic Semi-Gloss	Semi gloss	Acrylic Enamel	Primed by not finished painted exterior and site items	
Cement Fiber Siding and Trim	Factory Primed	Exterior Cement Siding	8	3.2	4	2	Per the Manf.	Dulex Ext. 2407 Latex	Per the Manf.	SpeedHide Acrylic Latex 6-900	S-W Loxon Acrylic Masonry Primer, A24W8300	S-W Metalatex Acrylic Semi-Gloss, B42 Series	Per the Manf.	Per the Manf.	Per the Manf.	Per the Manf.	Semi - Gloss	Latex		
Ext. Wood	Wood	Sheds, benches, fences, ext. wood	-	-	4	1.8	Ext. Stain; applied on species indicated to match Architect's sample.	Woodpride Exterior Gloss Polyurethane Varnish	Ext. Stain; applied on species indicated to match Architect's sample.	Exterior Polyurethane Satin Clear Varnish	Ext. Stain; applied on species indicated to match Architect's sample.	Exterior Wood Classics Polyurethane Varnish A67 Series	Ext. Stain; applied on species indicated to match Architect's sample.	Exterior Polyurethane Low Lustre	Ext. Stain; applied on species indicated to match Architect's sample.	exterior varnish	Low	Poly-urethane	Unfinished wood	
Traffic Paint	Concrete or Asphalt	parking lots					Per the Manf.	Water Reducible Acrylic - 4800	Per the Manf.	SpeedHide traffic zonaline 11-53										
Exterior CMU	Concrete Block	Misc Walls	16	8	4	2	BloxFill 4000 Int/Ext Acrylic Block Filler	Dulex Ext. 2407 Latex	LTC Block Surface Filler 4-100	SpeedHide Acrylic Latex 6-900	S-W PrepRite Block Filler, B25W25	S-W Metalatex Acrylic Semi-Gloss, B42 Series	M88 Block Filler	Super Spec Ext. Acrylic 184	Pro-Hide Silver Z8485 Block Filler	Pro-Hide Silver Int.Ext Semi Gloss z8301	Semi gloss	Acrylic Latex		

Interior Paint Schedule

Requirement			Mils per coat (Wet/Dry)				Manufacturer										Finish		Notes
Item	Substrate	Location	Primer		Finish		ICI		Pittsburg		Sherwin Williams		Benjamin Moore		Pratt & Lambert		Luster	Final Coats	
			w	D	W	D	Primer or Stain	2 Finish	Primer or Stain	2 Finish	Primer or Stain	2 Finish	Primer or Stain	2 Finish	Primer or Stain	2 Finish			
Factory Primed Steel	Factory Primed	Doors and Frames, Exposed Piping	-	3	-	3.25		Devflex High Performance 4216	90-709 Pitt-Tech Primer/Finish DTM	90-474 Pitt-Tech High Performance Waterborne DTM Enamel	DTM Acrylic Primer/Finish	DTM Acrylic Semi-Gloss #B66-200	M29 DTM	M29 DTM	Enducryl DTM Z6600 Series	Enducryl DTM Z6600 Series	Semi gloss	Acrylic Enamel	
Ferrous Metals	Primer on Bare Metal	Stacks, Pipes, Beams, Misc Metals	6	3	5	3	ICI - Devoe-Devflex - 4020	ICI - Devoe - DevFlex -4216	94-258 Multi Prime	7-844 Alkyd Semi Gloss Enamel	KemKromik Metal Primer B50Z	Metalatic DTM B55Z Series	M06 Alkyd Metal Primer	M29 DTM Acrylic	S4501 Rust Inhibitive Metal Primer	Maint. Gloss S4500 Series	Semi gloss	Acrylic Enamel	
Ferrous Metals	Primer on Bare Metal	Exposed Structure, Steel, Deck, Joist	2	-	4	2	Per the Manf.	Spraymaster Pro Uni-Grip-WB 1486	Per the Manf.	90-810 Pitt Tech Edt Semi-Gloss	Per the Manf.	Water Based Dryfall B42 T1,	M535 Semi-Gloss Dryfall Water Based M53 Flat Dryfall Water Base	M535 Semi-Gloss Dryfall	S4501 Rust Inhibitive Metal Primer	Enducryl Latex Dryfall Z5931 (black) or Z5900 (white)	Semi gloss	Latex	Test patch for adhesion to be approved by Architect before installation
Ferrous Metals	Galvanized Steel	Exposed Structure, Steel, Deck, Joist	2	-	4	2	Per the Manf.	Spraymaster Pro Uni-Grip-WB 1486	Per the Manf.	90-810 Pitt Tech Edt Semi-Gloss	Per the Manf.	Water Based Dryfall B42 T1,	M535 Semi-Gloss Dryfall Water Based M53 Flat Dryfall Water Base	M535 Semi-Gloss Dryfall	S4501 Rust Inhibitive Metal Primer	Enducryl Latex Dryfall Z5931 (black) or Z5900 (white)	Semi gloss	Latex	Test patch for adhesion to be approved by Architect before installation
Wood Stained	Wood	Clearcoat Only	-	-	4	1.8		Woodpride 1908 Interior Gloss Polyurethane Varnish		77-89 REZ Interior Polyurethane Satin Clear Varnish		Wood Classics Polyurethane Varnish A67 Series		C435 Benwood Polyurethane Low Lustre		Varmor R10 Series Varnish	Satin	Poly-Urethane	
Wood Stained	Wood	Stain and Varnished	-	-	4	1.8	Woodpride 1700	Woodpride 1802 Interior Gloss Polyurethane Varnish	Premium Custom Stain applied on species indicated	77-89 REZ Interior Polyurethane Satin Clear Varnish	Premium Custom Stain applied on species indicated	Wood Classics Polyurethane Varnish A67 Series	Premium Custom Stain applied on species indicated	C435 Benwood Polyurethane Low Lustre	Premium Custom Stain applied on species indicated	Varmor R10 Series Varnish	Satin	Poly-Urethane	Match Architect's sample or coordinate color with architect
Painted interior trim	Wood or Primed Composite Trim	Painted	4	1.4	4	1.6	Dulux Gripper 3210	Dulux 1434			S-W PrepRite ProBlock Latex. B51 Series	S-W ProMar 200 Latex Eg-Shel, B20W2200 Series					Satin	Latex	
Concrete Block - Eg Shel	Plain Block	Exposed Block	16	8	4	2	Prep & Prime 3010 Water-based Block Filler	Dulux Pro Premium 1402 Acrylic Latex	SpeedHide Interior/Exterior Masonry Latex Block Filler	6-411 Series SpeedHide Eggshell Acrylic Latex Enamel	PrepRite Block Filler B25W25	ProMar 200 Latex Eg-Shel	M88 Block Filler	274 Superspec Eggshell	Pro-Hide Silver Block Filler Z8485	Pro-Hide Gold Latex Egg-shell Z8200 Series	Eg-shel	Latex	
Concrete Block - Epoxy Coated	Plain Block	Exposed Block	16	8	4	2	Tru-Glaze-WB 4015 Water-Based Epoxy Block Filler	Tru-Glaze-WB 4408 Waterborne Epoxy Gloss Coating	97-685 Aquapon Epoxy Block Filler	95-1 Aquapon Gloss Epoxy	coat Kem Cati-Coat High Solids B42W400	Tile-Clad High Solids Series, Gloss	M36/M39 Epoxy High Build	M36/M39 Epoxy High Build	Techgard Epoxy, Block Filler S4250, S4251 (activator)	Palgard Epoxy, Gloss	Gloss	Expoxy	Epoxy Based Paint for Showers, High Humidity Areas and Kitchens
Concrete Block - Semi Gloss	Plain Block	Exposed Block	16	8	4	2	Prep & Prime 3010 Water-based Block Filler	Dulux Pro Premium 1406 Acrylic Latex Semi-Gloss	SpeedHide Int. Ext. Masonry Latex Block Filler	6-500 Series SpeedHide Interior Semi-Gloss Latex	PrepRite Block Filler B25W25	ProMar 200 Latex Semi Gloss	M88 Block Filler	276 Superspec Semi-Gloss	Pro-Hide Silver Z8485 Block Filler	Pro-Hide Gold Z8300 Series Latex Semi-Gloss	Semi - Gloss	Latex	Higher Abuse Walls, Corridor Walls, Lobbies and Teaching walls
Concrete Block - Epoxy Coated - Semi	Plain Block	Exposed Block	16	8	6	3.5	Bloxfil 4000 Heavy Duty Acrylic Block Filler	-Glaze-WB 4406 Waterborne Epoxy Semi-Gloss Coating	6-7 SpeedHide Interior/Exterior Masonry Latex Block Filler	16-551 Pitt-Glaze WB Acrylic Epoxy Semi-Gloss	Preprite Block Filler B25W25	Water Based Catalyzed Epoxy B 70 Series, Semi-Gloss	M88 Block Filler	M42 Waterborne Epoxy	Z8465 Enducryl HP Block Filler	Enducryl Water Based Catalyzed Epoxy Z7021/Z7025, Semi-Gloss	Semi-Gloss	Expoxy	Water Based Epoxy for Girls and Boys Wet Walls Only

Gypsum Board - Standard Wall Application	Gypsum Board	General Areas	4	1.25	4	1.5	Dulux Gripper 3210	Dulux Pro Premium 1402 Acrylic Latex Eggshell	6-2 SpeedHide Interior Quick-Drying Latex Sealer	6-411 Series SpeedHide Eggshell Acrylic Latex Enamel	PrepRite 200 Latex Primer B28W200 Series	ProMar 200 Latex Eg-shel B20 Series	253 Superspec Primer	274 Superspec Eggshell	Z8160 Pro-Hide Gold Latex Primer	Pro-Hide Gold Series Latex Eggshell	Eg-shel	Latex	
Gypsum Board - Soffits	Gypsum Board	Soffits and Ceilings	4	1.25	4	1.5	Dulux Gripper 3210	Dulux 1210	6-2 SpeedHide Interior Quick-Drying Latex Sealer	6-70 Line SpeedHide Interior Wall Flat Latex Paint	PrepRite 200 Latex Primer B28W200 Series	ProMar 200 Flat Latex B30-200 Series	253 Superspec Primer	275 Superspec Flat	Z8160 Pro-Hide Gold Latex Primer	Z8100 Series Pro-Hide Gold Flat Latex	Flat	Latex	
Gypsum Board - Scrubbable	Gypsum Board	Walls	4	1.25	4	1.5	Prep & Prime Gripper 3210 Primer Sealer	Tru-Glaze-WB 4406 Waterborne Epoxy Semi-Gloss Coating	6-2 SpeedHide Interior Quick-Drying Latex Sealer	16-551 Pitt-Glaze WB Acrylic Epoxy Semi-Gloss	PrepRite 200 Latex Primer B28W200 Series	Water Based Catalyzed Epoxy Semi-Gloss B70 Series	023 Fresh Start Primer	M43/M44 Acrylic Epoxy Semi-Gloss,	Z8160 Pro-Hide Gold Latex Primer	Enducryl Water Based Catalyzed Epoxy Series (Z7025 Semi-Gloss Activator)	Semi-Gloss	Epoxy	Scrubbable and wet Applications
Gypsum Board - Scrubbable	Gypsum Board	Kitchens and Baths	4	1.25	4	1.5	Prep & Prime Gripper 3210 Primer Sealer	Zinsser Bathroom and Kitchen paint	-	-	-	-	-	-	-	-	Gloss	Latex	Scrubbable and wet Applications
VCT Flooring	VCT	Gym Floors	-	5	-	6	Devfloor 506 Water-Based Epoxy Primer and Devfloor 525 100% Solids Epoxy Surfacer	Devfloor 568 High Solids Urethane	PPG MegaSeal 99-6639 High Solids Primer Clear and 1 coat Megaseal WBPG 99-6637 WB Primer Gray	PPG Megseal HPU 99-6730 High Performance Urethane	CP #5531 primer at 500 to 1,000 sf per gallon and 1 coat GP #3504 High Solids Epoxy Primer	GP #4638 General Polymer	M36/M39 High Build Epoxy at 500 to 1,000 sf per gallon	coats of M36/M37 Epoxy Clear	S6700 Series HS Floor Epoxy and Activator	S6500 Series HS Polyurethane	Satin	Poly-Urethane	Stripping on VCT Floors

**SECTION 10 2800
TOILET AND BATH ACCESSORIES**

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Accessories for bathrooms.

1.2 RELATED DOCUMENTS:

- A. **ALTERNATE 1:** Section 00 7316 Build America, Buy America (BABA) Requirements

1.3 SUBMITTALS

- A. Manufacturer's product data for each type of accessory specified.
- B. Accessories schedule.
- C. **ALTERNATE 1:** The Contractor shall submit the following documentation for each article, material or supply that must meet the BABA requirements:
 - 1. A certificate from the manufacturer or reseller that the product complies.
 - 2. For products that cost less than \$100 per product, a copy of the label that indicates the product was made in the United States is acceptable to HUD.

PART 2 PRODUCTS

2.1 STANDARD UNIT – ACCESSORY SCHEDULE

- A. Shower Curtain Rod: 60" B-207, Bobrick or approved equal, straight, type 304 stainless steel, satin finish.
- B. Medicine Cabinet: 24"W x 26", HD Supply Zenith #404441, Surface mount beveled tri-view mirrored medicine cabinet
- C. Toilet Paper Dispenser: American Specialties, Inc. 0705-Z, Zamac Toilet Tissue Holder (Single) Chrome Plated
- D. 24" Towel Bar: American Specialties, Inc., 0755-Z-24 Towel Bar (Round) – Surface Mounted, Chrome Plated Zamak – 24".
- E. 18" Towel Bar: American Specialties, Inc., 0755-Z-18 Towel Bar (Round) – Surface Mounted, Chrome Plated Zamak – 18".

2.2 MATERIALS

- A. Stainless Steel Sheet: ASTM A666, Type 304, No. 4 satin brushed finish.
- B. Galvanized Sheet Steel: Hot-dipped galvanized steel sheet, ASTM A653/A653M, with G90/Z275 coating.
- C. Chrome/Nickel Plating: ASTM B456, US26 unless otherwise noted.
- D. Mirror Glass: Float glass, ASTM C1036 Type I, Class 1, Quality Q2, with silvering, protective and physical characteristics complying with ASTM C1503.
- E. Adhesive: Two component epoxy type, waterproof.
- F. Fasteners, Screws, and Bolts: Hot dip galvanized, tamper-proof, security type.
- G. Expansion Shields: Fiber, lead, or rubber as recommended by accessory manufacturer for component and substrate.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install accessories in accordance with manufacturers' instructions.
- B. Install plumb and level, securely and rigidly anchored to substrate.
- C. Mounting Heights and Locations: Comply with specified accessibility regulations.

END OF SECTION 10 2800

**SECTION 10 5623
WIRE STORAGE SHELVING**

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Wall mounted wire closet shelving.
- B. Adjustable pantry shelving.
- C. Accessories.

1.2 RELATED DOCUMENTS

- A. **ALTERNATE 1:** Section 00 7316 Build America, Buy America (BABA) Requirements

1.3 SUBMITTALS

- A. **ALTERNATE 1:**The Contractor shall submit the following documentation for each article, material or supply that must meet the BABA requirements:
 - 1. A certificate from the manufacturer or reseller that the product complies.
 - 2. For products that cost less than \$100 per product, a copy of the label that indicates the product was made in the United States is acceptable to HUD.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Owner's Standard: ClosetMaid Corporation Superslide: www.closetmaid.com.

2.2 SHELVING APPLICATIONS

- A. Shelf Depth: 12 inches (305 mm), unless otherwise indicated.

2.3 MATERIALS

- A. Wire Shelving: Factory-assembled coated wire mesh shelf assemblies for wall-mounting, with all components and connections required to produce a rigid structure that is free of buckling and warping.
 - 1. Construction: Cold-drawn steel wire with average tensile strength of 100,000 psi (690 MPa) resistance welded into uniform mesh units, square, rigid, flat, and free of dents or other distortions, with wires trimmed smooth.
 - 2. Coating: PVC or epoxy, applied after fabrication, covering all surfaces.
 - 3. PVC Coating: 9 to 11 mils (0.23 to 0.028 mm) thick.
 - 4. Standard Mesh Shelves: Cross deck wires spaced at 1 inch (25.4 mm).
 - 5. Shelf and Rod Units: Integral hanging rod at front edge of shelf.
- B. Mounting Hardware: Provide manufacturer's standard mounting hardware; include support braces, wall brackets, back clips, end clips, poles, and other accessories for complete and secure installation; factory finished to match shelving.
- C. Fasteners: As recommended by manufacturer for mounting substrates.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install in accordance with manufacturer's instructions, with shelf surfaces level.
- B. Cap exposed ends of cut wires.
- C. Install back clips, end clips at side walls, and support braces at open ends. Install intermediate support braces as recommended by manufacturer.
- D. Mounting Heights:
 - 1. Single Hanging Rod Units: Install shelf at 68 inches (1727 mm) above floor.
 - 2. Double Hanging Rod Units: Install shelves at 42 inches (1067 mm) and 84 inches (2134 mm) above floor.

END OF SECTION 10 5623

**SECTION 12 3530
RESIDENTIAL CASEWORK**

PART 1 - GENERAL

1.1 SECTION INCLUDES: Kitchen cabinets and Casework hardware.

1.2 RELATED REQUIREMENTS

- A. Section 12 3610 – Solid Surface Fabrications.
- B. **ALTERNATE 1:** Section 00 7316 – Build America, Buy America (BABA) Requirements

1.3 SUBMITTALS:

- A. Shop Drawings: Indicate casework locations, large scale plans, elevations, clearances required, rough-in and anchor placement dimensions and tolerances.
- B. **ALTERNATE 1:** The Contractor shall submit the following documentation for each article, material or supply that must meet the BABA requirements:
 - 1. A certificate from the manufacturer or reseller that the product complies.
 - 2. For products that cost less than \$100 per product, a copy of the label that indicates the product was made in the United States is acceptable to HUD.

1.4 QUALITY ASSURANCE

- A. Products: Complying with KCMA A161.1 and KCMA Certified.
- B. Manufacturer: Company specializing in manufacturing the type of products specified in this section, with minimum three years of documented experience.

1.5 MOCK-UP: Provide full size mock-up of casework base unit to be located where directed. Mock-up may remain as part of the Work.

PART 2 - PRODUCTS

2.1 MANUFACTURERS: Basis of Design for all cabinets are to be manufactured by:

- A. Casework: Basis of Design: Smart Cabinetry – Dover Series
 - 1. Kraftmaid Cabinetry, Inc: www.kraftmaid.com.
 - 2. Craft 33
 - 3. Advanta Cabinet works

2.2 COUNTERTOPS: As specified in Section 12 3610 – Solid Surface Fabrications.

2.3 HARDWARE

- A. Drawer and Door Pulls: Hafele - Cornerstone Collection -128 mm Centers Pull
- B. Catches: Magnetic.

2.4 FABRICATION

- A. Fabricate each unit to be rigid and not dependent on building structure for rigidity.
- B. Provide cutouts for plumbing fixtures, appliances, and fixtures and fittings. Prime paint contact surfaces of cut edges.
- C. When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide trim for scribing and site cutting.

2.5 FINISHES: Provide full line of manufactures wood species and finishes.

PART 3 - EXECUTION

3.1 EXAMINATION: Verify adequacy of support framing.

3.2 INSTALLATION: Install casework, components and accessories in accordance with manufacturer's instructions.

3.3 ADJUSTING: Adjust doors, drawers, hardware, fixtures, and other moving or operating parts to function smoothly.

3.4 CLEANING: Clean casework, countertops, shelves, and hardware.

3.5 PROTECTION: Do not permit finished casework to be exposed to continued construction activity.

END OF SECTION 12 3530

**SECTION 12 3600
SOLID SURFACE FABRICATIONS**

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Integral solid surface vanity sinks

1.2 RELATED REQUIREMENTS

- A. Section 07 9200 - Joint Sealants: For sealing of joints with adjacent materials.
- B. Plumbing Fixtures: Specs on drawings
- C. **ALTERNATE 1:** Section 00 07316 – Build America, Buy America (BABA) Requirements

1.3 REFERENCE STANDARDS

- A. ANSI A208.1 - American National Standard for Particleboard; current edition.
- B. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
- C. AWI - Quality Standard Illustrated.
- D. ISSFA-2 - Classification and Standards for Solid Surfacing Material.

1.4 SUBMITTALS

- A. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Specimen warranty.
- B. Shop Drawings: Complete details of materials and installation; combine with shop drawings of related work specified in other sections.
 - 1. Show proposed locations of all seams for the Architect's approval prior to fabrication.
- C. Verification Samples: For each finish product specified, minimum size 6 inches square, representing actual product, color, and patterns.
- D. Test Reports: Chemical resistance testing, showing compliance with specified requirements.
- E. Maintenance Data: Manufacturer's instructions and recommendations for maintenance and repair of countertop surfaces.
- F. **ALTERNATE 1:** The Contractor shall submit the following documentation for each article, material or supply that must meet the BABA requirements:
 - 1. A certificate from the manufacturer or reseller that the product complies.
 - 2. For products that cost less than \$100 per product, a copy of the label that indicates the product was made in the United States is acceptable to HUD.

1.5 QUALITY ASSURANCE

- A. Fabricator Qualifications: Same fabricator as for cabinets on which tops are to be installed.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.7 FIELD CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

PART 2 - PRODUCTS

2.1 SOLID SURFACE ASSEMBLIES

- A. Solid Surfacing Sheet and Plastic Resin Castings: Complying with ISSFA-2 and NEMA LD 3; acrylic or polyester resin, mineral filler, and pigments; homogenous, non-porous and capable of being worked and repaired using standard woodworking tools; no surface coating; color and pattern consistent throughout thickness.

1. Finish on Exposed Surfaces: Matte, gloss rating of 5 to 20.
2. Exposed Edge Treatment: Built up to minimum 1 inch thick; bullnosed edge; use marine edge at sinks.
4. Back Splashes: Same sheet material, square top; minimum 4 inches high.
5. Grade: 3 or better.

2.2 HARDWARE

- A. Work Surface Support Brackets: Provide reversible steel support brackets equivalent to A&M Hardware, Inc., Work Station Brackets or equivalent by another approved manufacturer, and as follows:
 1. Load capacity: Not less than 1000 lbs per bracket.
 2. Factory-Applied Primer: Brackets shall be factory-primed and field-painted to match the wall to which it is attached. Refer to the Finish Legend on the Drawings for pre-selected paint colors.
- B. Attachments, Screws, and Bolts: Stainless steel, tamper proof type.
 1. For attaching panels and pilasters to brackets: Through-bolts and nuts; tamper proof.

2.3 ACCESSORY MATERIALS

- A. Adhesives: Chemical resistant waterproof adhesive as recommended by manufacturer of materials being joined.
- B. Joint Sealant: Mildew-resistant silicone sealant, clear.

2.4 FABRICATION

- A. Fabricate items in the largest sections practicable, with top surface of joints flush.
 1. Join lengths of tops using best method recommended by manufacturer.
 2. Fabricate to overhang fronts and ends of cabinets 1 inch except where top butts against cabinet or wall.
 3. Prepare all cutouts accurately to size; replace tops having improperly dimensioned or unnecessary cutouts or fixture holes.
- B. Provide back/end splash wherever counter edge abuts vertical surface unless otherwise indicated.
 1. Secure to countertop with concealed fasteners and with contact surfaces set in waterproof glue.
 2. Height: 4 inches, unless otherwise indicated.
- C. Solid Surfacing: Fabricate items up to 144 inches long in one piece; join pieces with adhesive sealant in accordance with manufacturer's recommendations and instructions.
- D. Wall-Mounted Counters: Provide skirts, aprons, brackets, and braces as indicated on drawings, finished to match.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
- C. Verify that wall surfaces have been finished and mechanical and electrical services and outlets are installed in proper locations.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Securely attach items to substrates using concealed fasteners. Make flat surfaces level; shim where required.
- B. Seal joints.

3.4 TOLERANCES

- A. Variation From Horizontal: 1/8 inch in 10 feet, maximum.
- B. Offset From Wall, Countertops: 1/8 inch maximum; 1/16 inch minimum.
- C. Field Joints: 1/8 inch wide, maximum.

3.5 CLEANING

- A. Clean installed surfaces thoroughly.

3.6 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION 12 3600