

PROJECT MANUAL

WATERFALL HIGH-RISE SECURITY UPGRADES

ELKHART HOUSING AUTHORITY



May 8, 2025

TABLE OF CONTENTS

	<u>Page</u>
<u>DIVISION 0 - BIDDING AND CONTRACT REQUIREMENTS</u>	
Notice to Bidders	00 10 00-1 thru 00 10 00-2
<u>Instructions to Bidders</u>	
Instructions to Bidders (HUD-5369), pages 1-4	00 20 00-1
Supplemental Instructions to Bidders	00 21 00-1 thru 00 21 00-4
Prevailing Wage Requirements/General Wage Decision (pages 1-19)	00 21 50-1
Executive Order No. 11246	00 21 50-2
General Contractor's Requirements for Minority Participation	00 21 50-3
Standard Federal Equal Opportunity Construction Contract Specifications	00 21 50-4 thru 00 21 50-7
Subpart B - Contractor's Agreement	00 21 50-8 thru 00 21 50-9
Section 3 Clause	00 21 50-10
Special Notice to Contractors Regarding Section 3	00 21 50-11
<u>Bid Forms and Certifications</u>	
Bid Forms	00 40 00-1
Proposal for Construction	00 41 00-1 thru 00 41 00-2
Form 96/Non-Collusive Affidavit	00 42 00-1 thru 00 42 00-6
Equal Employment Opportunity/Affirmative Action Statement of Policy	00 45 00-1
Certificate as to Corporate Principal	00 45 00-2
MBE/WBE Clause Certification	00 45 00-3 thru 00 45 00-4
MBE/WBE Clause Certification: Schedule of Intended Participation	00 45 00-5
MBE/WBE Clause Certification: Certificate of Good Faith Efforts	00 45 00-6
Representations, Certifications and Other Statements of Bidders (HUD 5369-A), pages 1-3	00 45 00-7
Non-Debarred Certification	00 45 00-8
Proposed Subcontractors and Suppliers	00 45 00-9
Proposed Wage Rate for Unlisted Classifications	00 45 00-10
Drug-Free Workplace Requirements	00 45 00-11 thru 00 45 00-12
Certificate for a Drug-Free Workplace (HUD -50070)	00 45 00-13 thru 00 45 00-14
<u>Contracting Agreements</u>	
Form of Contract	00 52 00-1 thru 00 52 00-2
Hold Harmless Agreement	00 54 00-1
Notice to Proceed	00 55 00-1
<u>Contracting Requirements</u>	
Equal Employment Opportunity Certification (HUD-92010)	00 62 00-1 thru 00 62 00-2
Section 3 Plan	00 62 00-3 thru 00 62 00-7
Section 3 Compliance and Business Concern Acknowledgment Explanation	00 62 00-8
Notice of Nondiscrimination in Employment	00 62 00-9
Subcontracts Awarded	00 62 00-10
Request for Acceptance of Subcontractor	00 62 00-11
Non-Collusive Affidavit for Subcontractor	00 62 00-12
Certificate from Contractor Appointing Officer or Employee to Supervise Payment of Employee (HUD-5282)	00 62 00-13
Contractor's Certification Concerning EEO Requirements	00 62 00-14
Statement of Compliance	00 62 00-15 thru 00 62 00-16

	<u>Page</u>
<u>DIVISION 0 - BIDDING AND CONTRACT REQUIREMENTS (Cont.)</u>	
<u>Contracting Requirements (Cont.)</u>	
Payroll Form WH-347	00 62 00-17 thru 00 62 00-19
Monthly Employment Utilization Report (CC-257)	00 62 00-20 thru 00 62 00-21
Application and Certificate for Payment	00 62 00-22 thru 00 62 00-23
Contractor's Certification	00 62 00-24
Affidavit and Waiver of Lien	00 62 00-25
Affidavit of Completion	00 64 00-1
Contractor's Certificate of Guarantee	00 64 00-2
Letter of Release	00 64 00-3
Consent of Surety to Final Payment (AIA G707)	00 64 00-4
Form of Contractor's Certificate and Release	00 64 00-5 thru 00 64 00-6

General Conditions

General Conditions (HUD-5370), pages 1-19	00 70 00-1
---	------------

Supplementary General Conditions

Supplementary General Conditions	00 80 00-1 thru 00 80 00-10
Contractor's Insurance	00 85 00-1 thru 00 85 00-3

DIVISION I - GENERAL REQUIREMENTS

Summary of Work	01 10 00-1 thru 01 10 00-2
Allowances	01 22 00-1
Alternates	01 23 00-1
Submittals	01 33 00-1 thru 01 33 00-2
Cutting and Patching	01 34 00-1 thru 01 34 00-2
Temporary Facilities	01 50 00-1
Substitutions	01 60 00-1
Substitution Request Form	01 61 00-1
Project Record Documents	01 72 00-1
Cleaning	01 74 00-1 thru 01 74 00-2

DIVISION II - EXISTING CONDITIONS

Demolition	02 41 00-1 thru 02 41 00-2
------------------	----------------------------

<u>DIVISION III and DIVISION IV</u>	Not Used
---	----------

DIVISION V - METALS

Miscellaneous Metal	05 05 23-1 thru 05 05 23-7
Cold-Formed Metal Framing	05 40 00-1 thru 05 40 00-6

<u>DIVISION VI</u>	Not Used
--------------------------	----------

DIVISION VII - THERMAL AND MOISTURE PROTECTION

Building Insulation	07 21 00-1 thru 07 21 00-3
Exterior Insulation and Finish System	07 24 00-1 thru 07 24 00-3
Flashing and Trim	07 62 00-1 thru 07 62 00-6
Joint Sealants	07 92 00-1 thru 07 92 00-4

	<u>Page</u>
<u>DIVISION VIII - DOORS AND WINDOWS</u>	
Hollow Metal Doors and Frames	08 11 13-1 thru 08 11 13-8
Aluminum Windows.....	08 51 13-1 thru 08 51 13-6
Door Hardware	08 71 00-1 thru 08 71 00-13
Glazing	08 80 00-1 thru 08 80 00-9
<u>DIVISION IX - FINISHES</u>	
Gypsum Board	09 21 16-1 thru 09 21 16-5
Interior Painting	09 91 23-1 thru 09 91 23-5
<u>DIVISION X thru DIVISION XXV</u>	Not Used
<u>DIVISION XXVI - ELECTRICAL</u>	
Selective Demolition for Electrical	26 05 05-1 thru 26 05 05-2
Low-Voltage Electrical Power Conductors and Cables	26 05 19-1 thru 26 05 19-6
Grounding and Bonding for Electrical Systems	26 05 26-1
Conduit for Electrical System	26 05 33.13-1 thru 26 05 33.13-5
Boxes for Electrical Systems	26 05 33.16-1 thru 26 05 33.16-4
Wiring Devices	26 27 26-1 thru 26 27 26-4
<u>DIVISION XXVII thru DIVISION XXXII</u>	Not Used

DIVISION 0
Bidding and Contract Requirements

NOTICE TO BIDDERS

1. The Housing Authority of the City of Elkhart, Indiana will receive sealed Bids in its offices at 1396 Benham Avenue, Elkhart, Indiana 46516, until the hour of 3:30 p.m., local time, June 5, 2025. A public bid opening will occur at that time. Any bid received after the above designated time will be returned unopened. The work shall be performed as per Plans and Specifications prepared by Alliance Architects, 929 Lincolnway East, Suite 200, South Bend, Indiana, and Bids are desired for the Waterfall High-Rise Security Upgrades, in Elkhart, Indiana.
2. Replacement of the interior storefronts at Offices 105 and 107 with partition walls and new doors with a buzzer system. Replacement of the exterior storefront of both Offices with EIFS walls. New exit door at Office 107.
3. All prime Contractors submitting Bids on the Project shall encourage qualified minority subcontractors to perform any portion of the Work in the Project which is not performed by the Contractor's own forces. All bidders shall comply with HUD Section 3 Clause of regulation 24 C.F.R. Part 75.
4. Said Housing Authority of the City of Elkhart, Indiana is not obligated to accept the lowest or any other Bid submitted and reserves the right to reject any and all Proposals, to waive informalities in any Proposal if it shall be in the judgment of the Housing Authority of the City of Elkhart so to do and to defer the acceptance or rejection until the financial arrangements for said Project are completed.
5. Plans and Specifications may be obtained from Alliance Architects, 929 Lincolnway East, Suite 200, South Bend, Indiana, on or after May 8, 2025. Electronic Plans and Specifications are available upon request. If hard copies are required, deposits to be made out to Housing Authority of the City of Elkhart in the amount of Fifty Dollars (\$50.00) will be required of Prime Contractors for each set of Drawings and Specifications, which amount shall be returned in full in case the following two conditions are complied with:
 - a. The return of Drawings and Specifications within ten (10) days after the date of receiving Bids and
 - b. The Drawings and Specifications are in usable condition as determined by the Architect.Should any Bidder fail in the observance of EITHER CONDITION, he shall forfeit the FULL AMOUNT of his deposit.
6. A Pre-Bid Meeting will be held May 15, 2025, at 1:00 p.m. (local time) at the Waterfall High-Rise located at 303 Waterfall Drive, Elkhart, Indiana. Site visits that are necessary after this date will be by appointment only and should be made through the Housing Authority of the City of Elkhart, Indiana by contacting Mr. Erik Mathavan, Director of Comprehensive Improvements, at 574-295-8392.
7. Instructions to Bidders, Plans, and Specifications including General Conditions are on file at:
 - a. Alliance Architects
929 Lincolnway East, Suite 200
South Bend, Indiana 46601
 - b. Housing Authority of the City of Elkhart
1396 Benham Avenue
Elkhart, Indiana 46516
www.ehai.org/open-public-bids.html

- c. MACIAF
212 W. Colfax Ave.
South Bend, IN 46601
- d. Dodge Data & Analytics
300 American Metro Blvd., Suite 185
Hamilton, NJ 08619
- e. ConstructConnect
3825 Edwards Road #800
Cincinnati, OH 45209
- f. CMD Group, LLC
30 Technology Parkway South, Suite 100
Norcross, GA 30092-2912

**SECTION 00 20 00
INSTRUCTIONS TO BIDDERS**

THE "INSTRUCTION TO BIDDERS", HUD DOCUMENT HUD-5369, PAGES 1-4, OCTOBER 2002 EDITION, ARE HEREBY MADE A PART OF THE CONTRACT DOCUMENTS, EXCEPT AS THEY MAY BE MODIFIED BY THE SUPPLEMENTAL INSTRUCTIONS TO BIDDERS AND THE SPECIFIC PROVISIONS OF THESE DOCUMENTS.

END OF SECTION

**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 —

Mr. Erik Mathavan
Director of Comprehensive Improvements
Elkhart Housing Authority
1396 Benham Avenue
Elkhart, IN 46516

[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 21 00
SUPPLEMENTAL INSTRUCTIONS TO BIDDERS**

PART 1 GENERAL

1.01 SUPPLEMENTS

- A. The following supplements modify, change, delete from or add to the "Instructions to Bidders for Contracts, Public and Indian Housing Programs". HUD-5369, 10/2002. All other clauses remain enforced.

1.02 CONDITIONS AFFECTING THE WORK

- A. Each bidder shall make a careful examination of the Plans and Specifications, visit the sites of the proposed construction and acquaint himself with all the conditions before submitting his proposal. He/she will be held responsible for any and all errors in his proposal resulting from his failure to make such examination. No "Request for Extras" will be entertained as a result of the bidder failing to examine the Plans and Specifications and inspecting the site. Any discrepancies between actual field conditions and work specified in Contract Documents shall be brought to the attention of the Architect prior to bidding. The Contractor shall be responsible for verifying all conditions and dimensions and shall be responsible for this work conforming to existing conditions. In order to facilitate site examinations, the Architect will be available to accompany bidders on the date and time as stated in the Pre-Bid Site Visit/Accessibility paragraph on page 00 10 00 NOTICE TO BIDDERS.
- B. By submission of a bid, a bidder warrants that he has visited the site to investigate the actual site conditions and made a careful examination of the Plans and Specifications. Additionally, the successful bidder agrees to enter into a Form of Agreement Between the Owner and Contractor as prescribed in 00 52 00 FORM OF CONTRACT. See Section 00 80 00 SUPPLEMENTARY GENERAL CONDITIONS for sales tax status.

1.03 BID GUARANTEE

- A. A bid guarantee is not required for this project.

1.04 WAGE RATES

- A. Wage rates on this work shall not be less than the prescribed scale of wages as determined pursuant to the provisions of the U.S. Department of Housing and Urban Development. Refer to 00 21 50 PREVAILING WAGE REQUIREMENTS included herein.
- B. Documentation of payroll and fringe benefits will be required for this project. The Contractor and its Subcontractors will be required to complete and submit either Payroll Form (WH-347) (manual payroll systems) or Statement of Compliance (WH-348) (computerized payroll system) for each work week during the course of the work. Review of these documents and requirements will be included at the pre-construction conference.

1.05 REQUIREMENTS FOR SIGNING PROPOSALS, BID BOND, AND PERFORMANCE AND PAYMENT BONDS

- A. Submitted by an Individual
- B. When submitted by an individual, said proposal shall be signed by the person making such proposal or the proposal must have attached thereto a Power-of-Attorney evidencing authority

to sign the bid in the name of the person for whom it is signed.

C. Submitted by a Partnership

1. When submitted by a partnership, said proposal shall be signed by all of the partners or by an Attorney-In-Fact. If signed by an Attorney-In-Fact, there must be attached to the proposal a Power-of-Attorney for the individuals for whom it is signed.

D. Submitted by a Corporation

1. When submitted by a Corporation, said proposal shall have the correct corporate name thereof and the signature of the president or other authorized officer of the corporation manually written below the corporate name, the attesting signature of the secretary of the corporation and shall have affixed the impression of the corporate seal. If such proposal is manually signed by an official other than the president of the corporation, a certified copy of a resolution of the board of directors evidencing the authority of such official to sign the bid should be attached.

1.06 WITHDRAWAL OF PROPOSALS

- A. Any bidder may withdraw his proposal at any time prior to the opening of bids.

1.07 PROPOSAL IRREGULARITIES

- A. Any error and/or omission in the proposal form or any other irregularity as a result of negligent preparation shall not furnish cause for relief for any damages resulting therefrom nor in any way relieve the Contractor from fulfillment of all contractual obligations as provided for in the Contract Documents.

1.08 COMPLETION TIME CONSIDERATION

- A. The anticipated date for award of the project is July 7, 2025. All work must be completed by October 27, 2025, including close-out documents, punch list repairs, and Owner training.

1.09 SUBSTANTIAL COMPLETION

- A. Substantial Completion is the stage in the progress of the work when the work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so the Owner can occupy or utilize the work for its intended use.

1.10 ALTERNATES

- A. Each bidder must provide a bid on all alternates listed in the Specifications (see Section 01 23 00) or noted on the Plans.
- B. The price to be added and/or deducted shall include all labor, materials, equipment, services, facilities and all other items required to complete the work as indicated on the Drawings and as specified herein.
- C. Each bidder is encouraged to submit voluntary alternates for materials, procedures and equipment that benefit the project and produce a savings to the Owner.

1.11 UNIT PRICES

- A. All unit prices listed on the bid form shall be included with the submission of the bid. Unit pricing found not to be in the best interest of the Elkhart Housing Authority may be grounds for rejection of proposal.

- B. All unit prices quoted shall include the sum of all additional costs of labor, materials, overhead, profit, fees and such other costs incidental to the work described.
- C. Unit prices shall be used to replace products, materials, etc., which cannot be repaired or reused as indicated on the Drawings and Specifications. Unit prices shall also be used to repair or replace products, materials, etc., which have been found unacceptable during field surveys and inspections after the Contract has been awarded, but prior to performing the addition work.

1.12 "OR EQUAL"

- A. Where the phrase "or equal", or "or equal as approved by the Architect" or "or Architect approved equal" occurs in the Contract Documents, do not assume that material, equipment or methods will be approved as equal by the Architect unless the item has been approved for this work in writing by the Architect.
- B. If "equal" products are permitted by the Contract Documents, submit all relevant technical information necessary to evaluate said products versus the specified products to the Architect a minimum of ten (10) business days prior to the bid due date.
- C. Any products which have not been reviewed by the Architect within the time frame noted above which the Contractor desires to use will be considered substitution requests and will be governed by Section 01 60 00 SUBSTITUTIONS.

1.13 FEES, PERMITS AND TAXES

- A. Bids prices and alternates shall include the cost of all permits, inspections, mandatory testing, and related fees.
- B. This program is not subject to Indiana State Sales Tax, Use Tax and Federal Excise Tax on materials used in construction.

1.14 RESPONSIBILITY OF PROSPECTIVE CONTRACTOR

- A. In addition to the Housing Authority's proposal form, include Form 96, Contractor's Bid for Public Work. Refer to pages 00 42 00-1 thru 00 42 00-6.

1.15 FORM OF CONTRACT

- A. The Agreement Form between the Housing Authority and the Contractor shall be per the Housing Authority's approved Contract form, where the basis of payment is a stipulated sum. See Section 00 52 00 FORM OF CONTRACT.

1.16 SUBMITTAL REQUIREMENTS AT TIME OF BID SUBMITTAL

- A. From time to time, the Owner finds it necessary to reject a bid because it does not comply with HUD requirements. In preparing your bid, please use the following checklist in order to make sure the bid has been prepared in the proper manner. ALL BIDS SHALL INCLUDE ONE ORIGINAL AND ONE COPY OF ALL OF THE FOLLOWING:
 - _____ Proposal for Construction form (refer to pages 00 41 00-1 and 00 41 00-2) properly executed and notarized, including all Alternates and Unit Prices.
 - _____ Contractor's Bid for Public Work - Form 96 (refer to pages 00 42 00-1 thru 00 42 00-6).

- _____ Acknowledgment of all Addenda on Proposal form.
- _____ Completion Time reference on Proposal form for base bid and each alternate to obtain substantial completion.
- _____ Bidders shall review the requirements for alternates, allowances, unit prices, and include all in their bid.
- _____ Equal Employment Opportunity/Affirmative Action Statement of Policy (refer to page 00 45 00-1).
- _____ Certificate as to Corporate Principal (page 00 45 00-2) (if bid is submitted by a Corporation).
- _____ MBE/WBE Clause Certification (refer to pages 00 45 00-3 thru 00 45 00-4).
- _____ MBE/WBE Clause Certification: Schedule of Intended Participation (refer to page 00 45 00-5). Schedule may be submitted at time of bid submittal or submitted to the Architect within five (5) calendar days after the time and date of bid submittal (see page 00 10 00 NOTICE TO BIDDERS).
- _____ MBE/WBE Clause Certification: Certificate of Good Faith Efforts (refer to page 00 45 00-6).
- _____ Representations, Certifications, and Other Statements of Bidders (HUD-5369-A, pages 1-3) (see page 00 45 00-7).
- _____ Non-Debarred Certification (refer to page 00 45 00-8) or proof of active registration with the U.S. Government System for Award Management.
- _____ Proposed Subcontractors and Suppliers (refer to page 00 45 00-9).
- _____ Proposed Wage Rates for unlisted classifications (refer to page 00 45 00-10). Rates may be submitted at time of bid or submitted to Architect within five (5) calendar days of time and date of bid submittal.
- _____ Drug-Free Workplace Certificate (refer to pages 00 45 00-13 and 00 45 00-14).
- _____ Evidence of active and current status under System Award Management (SAM).
- _____ Proposals shall be enclosed in a sealed envelope, properly labeled with the project name and forwarded with adequate time to enable it to arrive before the time and date noted on 00 10 00 NOTICE TO BIDDERS to:

WATERFALL HIGH-RISE SECURITY UPGRADES
Elkhart Housing Authority
Elkhart, Indiana

DELIVER TO:
Mr. Erik Mathavan
Director of Comprehensive Improvements
Elkhart Housing Authority
1396 Benham Avenue
Elkhart, Indiana 46516

ALL BIDS RECEIVED AFTER THE LEGALLY PUBLISHED DEADLINE WILL BE REJECTED.
END OF SECTION

SECTION 00 21 50
PREVAILING WAGE REQUIREMENTS

- A. Prevailing wage requirements for these projects have been determined by the U.S. Department of Labor and have been adopted by the U.S. Department of Housing and Urban Development and the Elkhart Housing Authority. Wage rates for these projects shall not be less than the prescribed scale of wages included herein:

General Decision Number IN20250005
Modification Number 4, Dated 04/04/2025

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards clauses (Title 29, part 5. CFR).

For purposes of submitting a bid, unlisted classifications shall be included as proposed on 00 45 00-13 PROPOSED WAGE RATE FOR UNLISTED CLASSIFICATIONS.

B. Prevailing Wages

Prevailing wages must be paid to all employees working on the job site. The Contractor is responsible for paying the applicable wage rates and ensure that any subcontractors pay the applicable rates. The Federal Labor Standard Provisions as well as the general wage determination must be included in subcontractor and lower-tier subcontractor contracts.

C. Payroll Report

The Contractor shall submit a certified payroll report and compliance statement to the Elkhart Housing Authority each week during the contract period. If no work is performed on the project during a given week, submit payrolls indicating "No Work". Weekly payrolls shall be numbered sequentially and the final payroll marked "final".

On the first payroll submitted, the address and social security number must be reported for each employee, updated for each new employee used during the project.

D. On-Site Employee Interviews

The enforcement of labor standards provisions is as important as other requirements of the contract specifications, and that compliance with such labor standards is mandatory by contractors and subcontractors. The Elkhart Housing Authority will be on the job site conducting employee interviews to ensure compliance with Federal Regulations. Each employee must be able to show their wage rate via payroll stubs and other acceptable means.

E. Posting

The U.S. Department of Labor "Red Poster" (WH-1321) will be required to be posted on the job site along with the General Wage Decision for this project. This posting informs employees of their rights and indicates that complaints will be received by the Elkhart Housing Authority. Your cooperation in this matter is mandatory.

"General Decision Number: IN20250005 04/04/2025

Superseded General Decision Number: IN20240005

State: Indiana

Construction Type: Building

Counties: Elkhart, Jasper, Kosciusko, Lagrange, Marshall, Newton, Pulaski and Starke Counties in Indiana.

LAGRANGE COUNTY

BUILDING CONSTRUCTION PROJECTS (does not include single family homes and apartments up to and including 4 stories).

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 14026 generally applies to the contract.. The contractor must pay all covered workers at least \$17.75 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2025.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 13658 generally applies to the contract.. The contractor must pay all covered workers at least \$13.30 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2025.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at

<http://www.dol.gov/whd/govcontracts>.

Modification Number	Publication Date
0	01/03/2025
1	02/21/2025
2	03/07/2025
3	03/14/2025
4	04/04/2025

ASBE0017-008 06/01/2024

NEWTON COUNTY:

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR.....	\$ 55.02	35.75
HAZARDOUS MATERIAL HANDLER (INCLUDES PREPARATION, WETTING, STRIPPING REMOVAL SCRAPPING, VACUUMING, BAGGING AND DISPOSAL OF ALL INSULATION MATERIALS, WHETHER THEY CONTAIN ASBESTOS OR NOT, FROM MECHAINCAL SYSTEMS).....	\$ 44.02	32.76

ASBE0041-001 07/01/2024

LAGRANGE COUNTY

	Rates	Fringes
HAZARDOUS MATERIAL HANDLER (includes preparation, wettings, stripping, removal, scrapping, vaccuming, bagging & disposing of all insulation materails, whether they contain asbestos or not, from mechanical systems).....	\$ 35.10	19.39
Insulator/asbestos worker (Includes application of all insulating materials, protective coverings, coatings and finishings to all types of mechanical systems).....	\$ 35.10	19.39

ASBE0075-001 06/01/2024

REMAINING COUNTIES

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR.....	\$ 39.50	28.19
HAZARDOUS MATERIAL HANDLER (includes preparation, wetting, stripping, removal, scrapping, vaccuming, bagging, and disposal of all		

insulation materials, whether
they contain asbestos or not,
from mechanical systems).....\$ 39.50 28.19

BOIL0374-004 01/01/2025

	Rates	Fringes
BOILERMAKER.....	\$ 48.24	37.01

BRIN0006-001 06/01/2023

JASPER, NEWTON & STARKE COUNTIES

	Rates	Fringes
BRICKLAYER (Including Stonemason, and Pointer, Caulker & Cleaner).....	\$ 42.05	28.22
Tile, Marble & Terrazzo Worker...	\$ 42.05	28.22

BRIN0018-003 06/01/2023

MARSHALL and PULASKI COUNTIES

	Rates	Fringes
Bricklayer, Caulker, Cleaner, Pointer.....	\$ 34.00	19.71
Terrazzo Worker Finisher.....	\$ 32.50	21.11
TERRAZZO WORKER/SETTER.....	\$ 34.50	23.62
Tile & Marble Finisher.....	\$ 32.50	21.11
Tile, Marble Setter.....	\$ 34.50	23.62

BRIN0018-004 06/01/2021

	Rates	Fringes
BRICKLAYER BRICKLAYERS, POINTER, CLEANER & CAULKERS.....	\$ 31.11	18.40
TERRAZZO FINISHERS.....	\$ 30.00	15.54
TILE AND MARBLE FINISHERS...	\$ 31.00	19.16
TILE AND MARBLE WORKERS.....	\$ 33.00	22.33

CARP0232-002 06/01/2024

Lagrange County

	Rates	Fringes
Carpenter & Piledrivermen.....	\$ 31.74	24.48

CARP0413-001 06/01/2024

ELKHART, KOSCIUSKO and MARSHALL COUNTIES

	Rates	Fringes
Carpenter & Piledrivermen.....	\$ 33.11	24.28

CARP1010-001 06/01/2024

JASPER, NEWTON, PULASKI & STARKE COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 43.58	34.66
MILLWRIGHT.....	\$ 45.68	35.63

CARP1029-001 06/01/2024ADAMS, ALLEN, CASS, DEKALB, ELKHART, FULTON, GRANT, HOWARD,
HUNTINGTON, KOSCIUSKO, LAGRANGE, MARSHALL, MIAMI, NOBLE, ST.
JOSEPH, STEUBEN, TIPTON, WABASH, WELLS and WHITLEY COUNTIES

	Rates	Fringes
MILLWRIGHT.....	\$ 33.90	29.08

ELEC0153-003 06/01/2024

ELKHART, KOSCIUSKO and MARSHALL COUNTIES

	Rates	Fringes
Communication Technician.....	\$ 26.50	18.33
ELECTRICIAN.....	\$ 43.00	27.97

Includes the installation, operation, inspection, modification, maintenance and repair of systems used for the transmission and reception of signals of any nature, for any purpose, including but not limited to , sound and voice transmission/transference systems, communication systems that transmit or receive information and /or control systems, television and video systems, micro-processor controlled fire alarm systems, and security systems and the performance of any task directly related to such installation or service. The scope of work shall exclude the installation of electrical power wiring and the installation of conduit raceways exceeding fifteen (15) feet in length.

* ELEC0305-001 12/01/2024

LAGRANGE COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 40.18	27.43%+12.16

ELEC0531-002 05/31/2023

JASPER, PULASKI, and STARKE COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 43.50	30.64

ELEC0697-002 06/01/2024

NEWTON COUNTY

	Rates	Fringes
ELECTRICIAN.....	\$ 48.10	31.28

ELEC0697-005 08/31/2024

NEWTON COUNTY

	Rates	Fringes
Telecommunication Technician.....	\$ 39.50	29.87

Work covers low voltage installation, maintenance and removal of telecommunication facilities (voice, sound, data and video) including, telephone and data inside wire, interconnect, terminal equipment, central offices, PABX, fiber optic cable and equipment, micro waves, V/SAT, bypass, CATV, WAN (wide area networks), LAN (local area networks), and ISDN (integrated system digital network). Work does not cover any work which properly comes under the work description of Inside JW (Journeyman Wireman), but shall cover the pulling of wire in raceways, ut not the installation of raceways.

ELEV0034-005 01/01/2025

JASPER, NEWTON and PULASKI COUNTIES

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 60.17	38.435+a+b

a) PAID HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Vetern's Day, Thanksgiving Day, the Friday after Thanksgiving, and Christmas Day.

b) Employer contributes 8% of regular hourly rate to vacation pay credit for employee with more than 5 years of service; 6% for less than 5 years' service.

ELEV0044-003 01/01/2025

ELKHART, KOSCIUSKO, LAGRANGE, MARSHALL and STARKE COUNTIES

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 62.27	38.435+a+b

a) PAID HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, the Friday after Thanksgiving, and Christmas Day.

b) Employer contributes 8% of regular hourly rate to vacation pay credit for employee with more than 5 years of service; 6% for less than 5 years' service.

ENGI0150-002 06/01/2024

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
ELKHART, KOSCIUSKO, LAGRANGE AND MARSHALL COUNTIES		
GROUP 1.....	\$ 33.15	37.30
GROUP 2.....	\$ 31.80	37.30
GROUP 3.....	\$ 31.00	37.30
GROUP 4.....	\$ 30.20	37.30
GROUP 5.....	\$ 27.60	37.30
JASPER, NEWTON, PULASKI & STARKE COUNTIES		
GROUP 1.....	\$ 46.55	44.48
GROUP 2.....	\$ 45.75	44.48
GROUP 3.....	\$ 41.45	44.48
GROUP 4.....	\$ 39.25	44.48
GROUP 5.....	\$ 33.80	44.48

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Mechanic, Asphalt Plant, Auto Grader; Batc Plant, Benoto (requires 2 Engineers), Boiler and Throttle Valve, Boring Machine, (Mining machine Caisson Rigs, Central Redi-mix Plant, Combination Backhoe, Endloader with Backhoe Bucket over 1/2 cu. yd., Combination Tugger Hoist and Air Compressor, Compressor and Throttle, Concrete Breaker (Truck Mounted), Concrete Conveyor (truck mounted), Concrete Paver 27E cu. ft. and under, Concrete Paver over 27E cu. ft., Concrete Pump/grout pump with boom (Truck Mounted), Concrete Tower, Cranes and backhoes (all), Cranes, Hammerhead Tower, Crete Crane, Derricks (all), Derricks (traveling) Forklift, Lull Type, Forklift (10 ton & over, Hoist 1, 2, and 3 drums, Hoist, 2 Tugger one floor, Hydraulic Boom Truck, :aser screed, Locomotives, All Motor Patrol, Mucking Machine, Pile Driving & Skid Rig, Pit Machines, Pre-Stress Machines, Pump Cretes & Similar Types, Rock Drill (Self- Propelled), Rock Drill (Truck Mounted), Slip-Form Paver, Straddle Buggies, Tractor with Boom & Side Boom, Trenching Machine, Winch Tractor

GROUP 2: Air compressors (30 feeding and common receivers, Asphalt Spreader, Boilers, Bulldozers, Combination Backhoe-end loader with Backhoe bucket 1/2 cu. ft. an under, Grader-Elevating, Greaser Engineer, Guard rail post driver, Grouting Machines; Highlift Shovels or Front Endloader Hoist (automatic), Corboy Drilling Machines, Hoist (all Elevators), Hoists drawn, Stone Crushers, Tounapull, Winch Trucks, Tugger single frum, post hole digger, rollers (all), scoops, tractor drawn .

GROUP 3: Concrete Mixer (2 bag and over), Conveyor, Portable, Steam Generators, Tractors (farm and similar type), Air Compressor (small 150 and under - 1 to 5 to exceed a total of 300 ft., Air Compressor (large over 150), Combination (small equipment operator), Forklift (under 10 tons), Generator, Pumps (1 to 3 not to exceed a total of 300 ft., Pumps (well points), Welding Machines (2 through 5, Winches (4 electric Drill Winches).

GROUP 4: Heaters, Mechanical (1 to 5), Oilers, Swithmen, Bull Gang (crane erection crew).

GROUP 5: Forklifts

For ELKHART, KOSCIUSKO, LAGRANGE AND MARSHALL COUNTIES

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Mechanic, Asphalt Plant, Asphalt Spreader, Auto Grader; Batch Plant, Benoto (requires 2 Engineers), Boiler and Throttle Valve, Boring Machine (road), Bulldozers with engines of 140 net horsepower or more, Caisson Rigs, Central Redi-mix plant, Concrete Conveyor Systems, Concrete Paver (over 27E cu. ft.), Concrete Paver (27E cu. ft. and under), Concrete placer, concrete placing boom, Concrete Pumps (Truck Mounted), Concrete Tower, Cranes and backhoes (all attachments), Cranes, Hammerhead, Creter Crane, Derricks (all), Forklift (capable of hoisting and mechanically moving forks horizontally), Grader, Elevating, Highlift Shovels or Front End Loaders, Hoists (2 or more drums), Lazer screed, Locomotives (all), Motor Patrol, Pile Drivers and Skid Rig, Pre-Stress Machines, Rock Drill (Self-Propelled), Rock Drill (Truck Mounted), Scoops (tractor drawn), Slip-form Paver, Tournapull, Tractor with Boom & Side Boom, Trenching Machine (12 or more inches in width), Combination Backhoe Front End Loader Machine with 1/2 cu. yd. or attachments.

GROUP 2: Air Compressor (600 cu. ft. and over), Bob Cat (over 3/4 cu. yd.), Boilers, Broom (all powered propelled), Bulldozers with engines less than 140 net horsepower, Combination backhoe frontend machine 1/2 cu yd backhoe bucket or under or with attachments Compressor and Throttle Valve, Concrete Breaker (truck mounted), Concrete Mixer (of more than 21 cu. ft. capacity), Forklift (with fixed or tilt mast), Greaser, Highlift shovel or frontend loader (3 yd bucket and under), Hoists (1 drum), Hydraulic Boom Truck, Post Hole Digger (vehicle mounted), Pumps, Cretes (squeeze crete type pumps, Gypsum bulker and pump), Rollers (all), Steam Generators, Stone Crushers, Straddle Buggies, Tractors, Winch Trucks (with "a" frame).

GROUP 3: Buck Hoist, Combination (small equipment operator), Conveyor (portable), Grouting Machine, Hoist Elevators (material and personnel), Hydraulic Power Units, Grouting and Pile Driving, Stud Welder, Trenching Machines less than 12 inches in width, Welding Machines (8 through 15).

GROUP 4: Bobcat (up to and including 3/4 cu. yd.). Compressor (over 210 cu. ft. and less than 600 cu. ft.), Generator (over 50 kw.), Heaters, Mechanical, Hoists (all elevator, permanent installation), Hoist (automatic), Hoist (tugger single drum), Oilers, Pumps, Well Points and electric submersible, Small Rubber Tired End Loaders (1/4 cu. yd. and under), Tractors (farm type) Welding Machines (2 through 8).

GROUP 5: Bobcats and forklifts (commercial or residential)

IRON0022-007 06/01/2024

JASPER (SOUTHEASTERN 1/2), NEWTON (SOUTHERN HALF), PULASKI

(REMAINDER OF COUNTY)

	Rates	Fringes
IRONWORKER.....	\$ 36.70	26.09

The following holidays shall be observed: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and the day after Thanksgiving and Christmas Day. Any holiday which occurs on a Sunday shall be observed the following Monday, unless the legal observance of these holidays is changed by law.

IRON0147-005 06/01/2024

KOSCIUSKO (REMAINDER OF COUNTY) and LAGRANGE (REMAINDER OF COUNTY)

	Rates	Fringes
IRONWORKER.....	\$ 34.20	26.39

IRON0292-004 06/01/2024

ELKHART, KOSCIUSKO (Northwest Half excluding Warsaw), LAGRANGE (Western Half including city of Lagrange), MARSHALL, MIAMI (Northwestern Tip), NOBLE (Northwestern Tip), PULASKI (Northeast Half), and STARKE COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 37.83	24.75

IRON0395-002 06/01/2024

JASPER (NORTHERN 1/2), NEWTON (NORTHERN 1/2), PULASKI (NORTHWESTERN TIP) COUNTIES

	Rates	Fringes
IRONWORKER		
IRONWORKERS.....	\$ 46.33	39.67
SHEETER.....	\$ 46.58	39.67

LAB00041-002 06/01/2024

JASPER and NEWTON COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 39.26	28.90
GROUP 2.....	\$ 40.75	28.90
GROUP 3.....	\$ 41.26	28.90

LABORER CLASSIFICATIONS

GROUP 1: Building and Construction Laborers; Scaffold Builders (other than for Mason or Plasterers); Mechanic Tenders; Rodmen and Chainmen, Railroad Workers, Masonry Wall Workers, (interior & exterior); Roofer Tenders, Cement Finisher Tenders, Carpenter Tenders, Portable Water, Pumps with discharge up to 3 inches; Waterproofing; Hauling of Creosote Lumber or Lutemen; Asphalt Rakers; Kettlem, Earth Compactors; Jackman and Sheetmen in Ditches more than 6 ft. deep; Laborers in ditches 6' deep or deeper; Assembly of Uncrete Pump; Tile Layers (sewer or field); Sewer Pipe Layers; Motor driven Wheelbarrows and Concrete Buggies; Hyster Operator; Pump Crete Assemblers; Core Drill Operator; Cement, Line or Silica Clay Handers; Handling of Toxic Materials damaging to clothing; Pneumatic Spikers; Deck Engine and Winch Operator; Water Main and Cable Ducking; Screed Man or Screw Operator on Asphalt Paver; Chain Saw and Demolition Saw Operator; Concrete Conveyor Assembler.

GROUP 2: Plaster Tenders, Masons Tenders; Mortar Mixers; Welders (acetylene or electric); Cutting Torch or Burner; Cement Nozzle; Cement Gun; Scaffold Builders when working for Plasterers, and Mason; Water Blast Machine Operator; Air Tool Operators and all Pneumatic Tool Operators; Air and Electric Vibrators and Chipping Hammer Operators; Asbestos Removal; Hazardous Waste Removal

GROUP 3: Dynamite Men; Drillers, Air Track or Wagon Drilling for explosives; Laborer Specialist

LAB00081-005 06/01/2024

STARKE COUNTY

	Rates	Fringes
LABORERS		
GROUP 1.....	\$ 39.26	28.90
GROUP 2.....	\$ 40.01	28.90
GROUP 3.....	\$ 40.26	28.90

LABORER CLASSIFICATIONS (BUILDING CONSTRUCTION)

GROUP 1: Building and Construction Laborers; Scaffold Builders (other than for Mason or Plasterers); Mechanic Tenders; Rodmen and Chainmen, Railroad Workers, Masonry Wall Workers, (interior & exterior); Roofer Tenders, Cement Finisher Tenders, Carpenter Tenders, Portable Water, Pumps with discharge up to 3 inches; Waterproofing; Hauling of Creosote Lumber or Lutemen; Asphalt Rakers; Kettlem, Earth Compactors; Jackman and Sheetmen in Ditches more than 6 ft. deep; Laborers in ditches 6' deep or deeper; Assembly of Uncrete Pump; Tile Layers (sewer or field); Sewer Pipe Layers; Motor driven Wheelbarrows and Concrete Buggies; Hyster Operator; Pump Crete Assemblers; Core Drill Operator; Cement, Line or Silica Clay Handers; Handling of Toxic Materials damaging to clothing; Pneumatic Spikers; Deck Engine and Winch Operator; Water Main and Cable Ducking; Screed Man or Screw Operator on Asphalt Paver; Chain Saw and Demolition Saw Operator; Concrete Conveyor Assembler.

GROUP 2: Plaster Tenders, Masons Tenders; Mortar Mixers; Welders (acetylene or electric); Cutting Torch or Burner; Cement Nozzle; Cement Gun; Scaffold Builders when working for Plasterers, and Mason; Water Blast Machine Operator; Air Tool Operators and all Pneumatic Tool Operators; Air and Electric Vibrators and Chipping Hammer Operators; Asbestos Removal; Hazardous Waste Removal

GROUP 3: Dynamite Men; Drillers, Air Track or Wagon Drilling for explosives; Laborer Specialist

LAB00274-002 06/01/2024

PULASKI COUNTY

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 26.98	18.00
GROUP 2.....	\$ 27.73	18.00
GROUP 3.....	\$ 28.48	18.00

LABORER CLASSIFICATIONS

GROUP 1: Building and Construction Laborers; Scaffold Builders (other than for Mason or Plasterers); Mechanic Tenders; Rodmen and Chainmen, Railroad Workers, Masonry Wall Workers, (interior & exterior); Roofer Tenders, Cement Finisher Tenders, Carpenter Tenders, Portable Water, Pumps with discharge up to 3 inches; Waterproofing; Hauling of Creosote Lumber or Lutemen; Asphalt Rakers; Kettlem, Earth Compactors; Jackman and Sheetmen in Ditches more than 6 ft. deep; Laborers in ditches 6' deep or deeper; Assembly of Uncrete Pump; Tile Layers (sewer or field); Sewer Pipe Layers; Motor driven Wheelbarrows and Concrete Buggies; Hyster Operator; Pump Crete Assemblers; Core Drill Operator; Cement, Line or Silica Clay Handlers; Handling of Toxic Materials damaging to clothing; Pneumatic Spikers; Deck Engine and Winch Operator; Water Main and Cable Ducking; Screed Man or Screw Operator on Asphalt Paver; Chain Saw and Demolition Saw Operator; Concrete Conveyor Assembler.

GROUP 2: Plaster Tenders, Mortar Mixers; Welders (acetylene or electric); Cutting Torch or Burner; Cement Nozzle; Cement Gun; Scaffold Builders when working for Plasterers, and Mason; Water Blast Machine Operator; Air Tool Operators and all Pneumatic Tool Operators; Air and Electric Vibrators and Chipping Hammer Operators; Asbestos Removal; Hazardous Waste Removal.

GROUP 3: Dynamite Men; Drillers, Mason Tenders; Air Track or Wagon Drilling for explosives; Laborer Specialist.

LAB00645-003 06/01/2024

BUILDING CONSTRUCTION

REMAINING COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 28.43	18.00
GROUP 2.....	\$ 28.93	18.00
GROUP 3.....	\$ 30.43	18.00

BUILDING CONSTRUCTION

GROUP 1: Building and Construction Laborers; Scaffold Builders (other than for Plasterers); Mechanic Tenders; Window Washers and cleaners; Waterboys and Toolhousemen; Roofers Tenders; Railroad Workers; Masonry Wall Washers (interior and exterior); Cement Finisher Tenders; Carpenter Tenders; All Portable Water pumps with discharge up to (3) inches; Plaster Tenders; Flag & Signal Person.

GROUP 2: Waterproofing; Handling of Creosot Lumber or like treated material (excluding railroad material); Asphalt Rakers and Lutemen; Kettlemen; Air Tool Operators and all Pneumatic Tool Operators; Air and Electric Vibrators and Chipping Hammer Operators; Earth Compactors Jackmen and Sheetmen working Ditches deeper than (6) ft.in depth; Laborers working in ditches (6) ft.in depth or deeper; Assembly of Unicrete Pump; Tile Layers (sewer or field) and Sewer Pipe Layer (metallic or non-metallic); Motor driven Wheelbarrows and Concrete Buggies; Hyster Operators; Pump Crete Assemblers; Core Drill Operators; Cement, Lime or Silica Clay Handlers (bulk or bag); Handling of Toxic Materials damaging to clothing; Pneumatic Spikers; Deck Engine and Winch Operators; Water Main and Cable Ducking (metallic and non-metallic); Screed Man or Screw Operator on Asphalt Paver; Chain and Demolition Saw Operators; Concrete Conveyor Assemblers.

GROUP 3: Water Blast Machine Operator; Mortar Mixers; Welders (Acetylene or electric); Cutting Torch or Burner; Cement Nozzle. Laborers; Cement Gun Operator; Scaffold Builders when Working for Plasterers. Dynamite Men; Drillers - Air Track or Wagon Drilling for explosives Hazardous and Toxic material handler, Mason Tenders, asbestos removal or handler.

PAIN0027-005 06/01/2024

NEWTON COUNTY, West of Highway #41

	Rates	Fringes
GLAZIER.....	\$ 51.55	43.99

PAIN0091-006 06/01/2024

	Rates	Fringes
PAINTER		
Brush & Roller, Drywall		
Taping & Finishing,		
Vinyl/Paper Hanging.....	\$ 31.00	18.62
Spray.....	\$ 31.50	18.62

PAIN0460-001 06/01/2024

JASPER, NEWTON, PULASKI AND STARKE COUNTIES:

	Rates	Fringes
Painters:		
Brush & Roller.....	\$ 39.00	28.76
Drywall Finisher.....	\$ 39.80	30.96

PAIN0469-003 06/01/2023

LAGRANGE COUNTY

	Rates	Fringes
Painters:		
Brush, Roller, Paperhanger, & Drywall Finishing.....	\$ 25.04	15.32
Lead Abatement.....	\$ 30.24	15.32
Spray & Sandblast Pot Tenders and Ground Personnel.....	\$ 25.04	15.32
Spray, Sandblast, Power Tools, Waterblast, & Steam Cleaning.....	\$ 25.04	15.32

PAIN1165-006 07/01/2024

JASPER, NEWTON (EAST OF HIGHWAY #41)

	Rates	Fringes
GLAZIER.....	\$ 42.09	29.23

PAIN1165-011 07/01/2024

ELKHART, KOSCIUSKO, LAGRANGE, MARSHALL, PULASKI, and STARKE
COUNTY

	Rates	Fringes
GLAZIER.....	\$ 32.22	23.57

PLAS0101-004 06/01/2018

MARSHALL COUNTY AND PULASKI (SOUTHERN 1/2)

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 28.84	14.48
PLASTERER.....	\$ 26.81	12.40

PLAS0101-005 06/01/2018

ELKHART, KOSCIUSKO AND LAGRANGE COUNTIES

	Rates	Fringes
--	-------	---------

CEMENT MASON/CONCRETE FINISHER...	\$ 28.84	14.48
PLASTERER.....	\$ 25.69	11.75

PLAS0165-002 07/01/2018

NEWTON COUNTY

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 37.28	18.53
PLASTERER.....	\$ 32.70	17.70

PLAS0406-002 07/01/2018

JASPER (REMAINDER OF COUNTY, INCLUDING WHEATFIELD), PULASKI (N 1/2) and STARKE COUNTIES

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 35.48	21.68
PLASTERER.....	\$ 33.28	17.32

PLAS0438-002 06/01/2018

PULASKI (NORTHERN 2/3), JASPER (N. EASTERN PORTION OF, WEST TO, BUT NOT INCLUDING WHEATFIELD), STARKE (ENTIRETY)

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 36.01	25.40

PLUM0166-002 06/01/2024

ELKHART, KOSCIUSKO, and LAGRANGE COUNTIES

	Rates	Fringes
PLUMBER.....	\$ 41.50	21.66

PLUM0172-001 06/01/2024

JASPER (S of the N. Side of the City of Rensselaer), MARSHALL, PULASKI and STARKE COUNTIES

	Rates	Fringes
Plumber, Pipefitter, Steamfitter.....	\$ 40.78	23.09

PLUM0210-003 09/01/2024

JASPER (to the City of Rensselaer) and NEWTON COUNTIES

	Rates	Fringes
PLUMBER.....	\$ 47.52	28.41

PLUM0597-004 06/01/2018

JASPER (Excluding the city limits of Rensselear), AND NEWTON
(Entire County)

	Rates	Fringes
PIPEFITTER.....	\$ 48.50	31.12

ROOF0023-001 06/01/2024

ELKHART, KOSCIUSKO, LAGRANGE, MARSHALL, PULASKI, and STARKE
COUNTIES

	Rates	Fringes
ROOFER		
COMPOSITION.....	\$ 34.55	21.04
SLATE & TILE.....	\$ 36.05	21.04

ROOF0026-001 06/01/2024

JASPER AND NEWTON COUNTIES

	Rates	Fringes
ROOFER.....	\$ 45.97	26.06

* SFIN0669-002 04/01/2025

	Rates	Fringes
SPRINKLER FITTER.....	\$ 45.40	27.88

SHEE0020-006 07/01/2023

	Rates	Fringes
SHEET METAL WORKER		
Elkhart, Kosciusko, & Marshall.....	\$ 38.40	28.05
Jasper, Newton, Pulaski, & Starke.....	\$ 47.60	29.31
Lagrange.....	\$ 37.82	26.37

TEAM0135-005 04/01/2024

JASPER and NEWTON COUNTIES

	Rates	Fringes
Truck drivers:		
GROUP 1.....	\$ 32.10	a
GROUP 2.....	\$ 32.60	a
GROUP 3.....	\$ 32.80	a
GROUP 4.....	\$ 32.95	a
GROUP 5.....	\$ 33.45	a

A: \$36.40 PER DAY & 450.00 PER WEEK.

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Single Axle Trucks seven (7) cu.yds. or less than ten and one-half (10 1/2) tons, dumpsters, scoop-mobiles five (5) cu.yds. and under or less than seven and one-half (7 1/2) tons, mixer trucks three (3) cu.yds. and under, air compressors and welding machines, including those pulled by separate units, batch trucks-wet or dry-2 ""34-E"" batches or less, truck driver helpers, warehousemen, mechanic's helpers, greasers and tiremen, all pick-up trucks and other vehicles. Drivers on dumpsters or similar dumpsters, mounted on four (4) wheel truck rated two (2) cu.yds. or less, and small pallet type fork-lift operator and drivers on pallet jacks or similar type equipment.

GROUP 2: Drivers on tandem axle eighteen (18) cu.yds. or twenty-four (24) tons gross, six (6) wheel trucks, Koehring or similar dumpsters, tract trucks, Euclids, hug bottom dumps, tournapulls, tournatrailers, trouarnarockers, or similar equipment when used for transportation purposes under nine (9) cu.yds. or less than thirteen and one-half (13 1/2) tons, tandems and semi-trailer service trucks, mixer trucks over three (3) cu.yds., fork lift, four (4) wheel A-frame trucks when used for transportation purposes, four (4) wheel winch trucks, pavement breakers, batch trucks-wet or dry-over 2 up to and including 4 - ""34-E"" batches two (2) men oil distributors, fork-lift under four (4) ton and vacuum trucks.

GROUP 3: Koehring or similar dumpsters, tract trucks, semi-trailer water trucks, Euclids, hug bottom dumps, tournapulls, tournatrailers, tournarockers, tractor-trailers, tandems Q-frame winch trucks, hydrolift trucks or similar equipment when used for transportation purposes, mixer trucks over six and one-half (6 1/2) cu.yds. batch trucks wet or dry over 4 - ""34-E"" batches single axle low boy trailers, and Contractor's mechanics when working on equipment operated by employees within this Bargaining Unit. Six (6) wheel pole trailers and one (1) man oil distributors, fork-lift over four (4) ton and mobile mixers.

GROUP 4: Drivers on heavy equipment over sixteen (16) cu.yds. or twenty-four ton, such as Koehring or similar dumpsters, tract trucks, Euclids, hug bottom dumps, trounapulls, tournarockers or similar equipment when used for transportation purposes, pole trailers over six (6) wheels, water pulls, low-boy trailers, tandem axles, quad axle or more no-weight limitation, diseal and/or heavy equipment mechanics when working on equipment operated by employees with this Bargaining unit.

GROUP 5: Mechanic furnishing his own tools.

TEAM0364-001 06/01/2024

BUILDING

ELKHART, KOSCIUSKO, LAGRANGE & MARSHALL COUNTIES:

Rates

Fringes

TRUCK DRIVER

GROUP 1.....	\$ 32.75	a+b
GROUP 2.....	\$ 32.95	a+b
GROUP 3.....	\$ 33.25	a+b
GROUP 4.....	\$ 33.75	a+b

FOOTNOTE:

a. FRINGE BENEFITS: \$422.50 per week

b. HOLIDAYS: New Year's Day, Memorial Day, Fourth of July,
Labor Day, Thanksgiving Day and Christmas Day

TRUCK DRIVERS BUILDING CLASSIFICATIONS

GROUP 1: Pickup Trucks
GROUP 2: Single Axle Trucks
GROUP 3: Tandem, Triaxle and Fuel Trucks
GROUP 4: Semi Trailer Trucks

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.

=====

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were

adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

Branch of Wage Surveys
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment

data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210.

=====

END OF GENERAL DECISION"

SECTION 00 21 50
EXECUTIVE ORDER 11246
"NOTICE AND EQUAL EMPLOYMENT OPPORTUNITY CLAUSE"

The Executive Order 11246 Notice calls to the attention of the offeror or bidder the affirmative action requirements of the Contract Specifications and sets forth the goals and timetables for minority and female participation in the Contractor's work force in each trade on all construction work in the designated geographical area (or "reporting county").

The Contract Specifications provide (in paragraph 14): The Contractor shall designate a responsible official to monitor all employment related activity to ensure that equal employment be required and to keep certain records.

The notices and Contract Specifications which all recipients of Federal funding must include in their solicitations for offers and bids on all contracts or subcontracts are attached.

SECTION 00 21 50
GENERAL CONTRACTOR'S REQUIREMENTS
FOR MINORITY PARTICIPATION

**NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY
(EXECUTIVE ORDER 11246)**

1. The Offeror's or Bidders' attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, have been set by the Public Housing Authority as follows:

<u>Timetables</u>	<u>Goals for Minority participation for each trade (percent)</u>
Life of Contract	20%

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 604 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3 (a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from meeting the Contractor's goals shall be a violation of the contract, the Executive Order, and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

SECTION 00 21 50
STANDARD FEDERAL EQUAL OPPORTUNITY CONSTRUCTION
CONTRACT SPECIFICATIONS
(EXECUTIVE ORDER 11246)

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract results.
 - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority.
 - c. "Employer Identification Number" means the Federal Social Security Number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - d. "Minority" includes:
 - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic Origin);
 - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, southeast Asia, the Indian Subcontinent of the Pacific Islands); and
 - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract the provision of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant of 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in any approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith effort to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs "a" through "p" of these specifications. The goals set forth in the solicitation from which this contract resulted in expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.

STANDARD FEDERAL EQUAL OPPORTUNITY CONSTRUCTION
CONTRACT SPECIFICATIONS
(EXECUTIVE ORDER 11246) (continued)

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foreman, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available and maintain a record of the organizations responses.
 - c. Maintain a current file on the names, addresses and telephone number of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason thereof, along with whatever additional actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor minority persons or women sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
 - e. Develop on-the-job training opportunities and/or participation in training programs for the area which expressly include minorities and women including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Dept. of Labor. The Contractor shall provide notice of these programs to the sources complied under 7b above.
 - f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

STANDARD FEDERAL EQUAL OPPORTUNITY CONSTRUCTION
CONTRACT SPECIFICATIONS
(EXECUTIVE ORDER 11246) (continued)

- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on site supervisory personnel such as Superintendents, General Foreman, etc. prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meeting persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female new media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs.

Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

- j. Encourage present minority and female employees to recruit other minority persons and women, and where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.
 - k. Validate all test and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
 - l. Conduct at least annually an inventory and evaluation of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for thorough appropriate training, etc., such opportunities.
 - m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
 - n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 - o. Document and maintain record of all solicitations of offers for subcontractors from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 - p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a thru p.). The efforts of contractor associations, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a thru p of these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive

STANDARD FEDERAL EQUAL OPPORTUNITY CONSTRUCTION
CONTRACT SPECIFICATIONS
(EXECUTIVE ORDER 11246) (continued)

impact on the employment of minorities and women in the industry, ensure to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is under utilized).
10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
13. The Contractor, in fulfilling its obligations under these specifications shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
14. The Contractor shall designate a responsible official to monitor all employment related activities to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g. mechanic, apprentices, trainee, helper or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g. those under the Public Work Employment Act of 1977 and the Community Development Block Grant Program).

SECTION 00 21 50
SUBPART B - CONTRACTOR'S AGREEMENT

During the performance of this Contract, the Contractor agrees as follows:"

- (1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action will include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates or pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.
- (2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.
- (3) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract of understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the Contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The Contractor will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of the rules and regulations, and relevant orders of the Secretary of Labor.
- (5) The Contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (6) In the event of the Contractor's noncompliance with the nondiscrimination clause of this contract or with any of such rules, regulations, or orders, in this contract may be cancelled, terminated or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked* as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulations, or order of the Secretary of Labor, or as otherwise provided by law.
- (7) The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) thru (7) in every subcontract or purchase order unless exempted by rules, regulations, or others 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 subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result direction by the administering agency, the Contractor may request the United States of enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: Provided, that if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

SUBPART B - CONTRACTOR'S AGREEMENT (continued)

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish and administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Conceal, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer to case to the Department of Justice for appropriate legal proceedings.

* Corrected to read "invoked". In the original text the word "involved" was printed in error.

SECTION 00 21 50
SECTION 3 CLAUSE

All Section 3 covered contents shall include the following clause (referred to as the Section 3 Clause):

- 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 135, which implements 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 135 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 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 persons(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 135, 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 135. 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 135.
- 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 135 require employment opportunities to be directed, were not filled to circumvent the Contractor's obligations under 24 CFR part 135.
- F. Noncompliance with HUD's regulations in 24 CFR part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.
- G. With respect to work performed in connection with Section 3 covered Indian housing assistance, Section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e) also applies to the work to be performed under this Contract. Section 7(b) requires that to the greatest extent feasible (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organization and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of Section 3 and Section 7(b) agree to comply with Section 3 to the maximum extent feasible, but not in derogation of compliance with Section 7(b).
- H. Pursuant to 24 CFR 905.70(b), compliance with Section 3 requirements 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, 25 U.S.C. Section 450e(b) when this law is applicable.

**SECTION 00 21 50
SPECIAL NOTICE TO CONTRACTORS
REGARDING SECTION 3**

Section 3 requires that, to the greatest extent feasible, opportunities for job training and employment be given to lower income residents of the Section 3 area and contracts for work in connection with the Section 3 covered project be awarded to business concerns which are located in or owned in substantial part by persons residing in the Section 3 area.

Section 3 requires that a recipient/contractor take affirmative steps to give preference to qualified Section 3 area residents and business concerns in providing training, employment and contracting in connection with Section 3 covered projects.

If, in bidding this project, you anticipate using local subcontractors, the Elkhart Housing Authority will provide you with names of Section 3 business concerns.

In the event additional employees will be added to your work force, in addition to those employees outlined in Specification Section 01 10 00 SUMMARY OF WORK, please target recruitment by:

1. Notifying the Elkhart Housing Authority of job openings
2. Advertising in local media
3. Contacting local job training and placement centers
4. Notify community organizations serving Section 3 residents
5. Developing on-the-job training opportunities

Once you have taken these steps, please provide documentation of your actions to the Elkhart Housing Authority for our project records.

**SECTION 00 40 00
BID FORMS**

THIS SECTION CONTAINS BLANK FORMS, SAMPLE FORMS AND STATEMENTS FOR COMPLIANCE - ALL REQUIRED SUBMITTALS FOR THIS PROJECT. REFER TO SECTION 00 20 00 INSTRUCTIONS TO BIDDERS FOR DOCUMENTS TO BE SUBMITTED AT TIME OF BID SUBMITTAL.

END OF SECTION

**SECTION 00 41 00
PROPOSAL FOR CONSTRUCTION**

**WATERFALL HIGH-RISE SECURITY UPGRADES
Elkhart Housing Authority
Elkhart, Indiana**

Gentlemen:

1. The undersigned, having familiarized themselves with the local conditions affecting the cost of the work, and with the Specifications (including Notice to Bidders, Instructions to Bidders, this proposal, Bid Guarantee, Non-Collusive Affidavit, the General Conditions, the Supplemental General Conditions, the Summary Scope of Work, the Specifications, and the Drawings) and Addenda, if any thereto, as prepared by Alliance Architects, and on file in the office of the Architects, 929 Lincolnway East, Suite 200, South Bend, IN 46601 and the Elkhart Housing Authority located at 1396 Benham Avenue, Elkhart, Indiana 46516, hereby proposes to furnish all labor, materials, tools, equipment, and services required to complete all modernization work items as listed on the Drawings and outlined in the Specifications, all in accordance therewith, for the sum of:

Base Bid, including all allowances (See Section 01 22 00 ALLOWANCES) \$ _____

2. In submitting this bid proposal, it is understood that the right is reserved by the Housing Authority to reject any and all bids. If written notice of the acceptance of this bid is mailed, telegraphed or delivered to the undersigned 90 days after the opening thereof, or at any time thereafter before this bid is withdrawn, the undersigned agrees to execute and deliver a contract in the prescribed form and furnish the required assurance within ten (10) days after the contract is presented to him for signature
3. We propose to begin work immediately upon receipt of a formal Notice to Proceed and to achieve Substantial Completion of same within the following calendar days. In the case that Alternates are accepted, the number of calendar days shall be increased or decreased from the Base Bid completion time as follows:

Base Bid _____ Calendar Days

4. Certification of Nonsegregated Facilities: By signing this bid, the bidder certifies that he complies with Item 10 of the "Representations, Certifications, and Other Statements of Bidders."
5. Bid Guarantee in the sum of \$ _____, in the form of _____, is submitted herewith in accordance with the specifications (5% of base bid and all allowances and add alternates).
6. Attached hereto is an affidavit in proof that the undersigned has not entered into any collusion with any person in respect to this proposal or any other proposal or the submitting of proposals for the contract for which his proposal is submitted.
7. Note: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.
8. Acknowledge receipt of Addendum (Addenda) and Clarification(s).

The following addenda have been received, and are hereby acknowledged, and their execution is included in the above proposal amount:

Addendum No. _____, Dated _____ Addendum No. _____, Dated _____

Addendum No. _____, Dated _____ Addendum No. _____, Dated _____

Clarification No. _____, Dated _____ Clarification No. _____, Dated _____

Official Company Name and Address:

Bidder's Company Name: _____

Bidder's Address: _____

Bidder's Cell Phone No: _____

Bidder's Office Phone No: _____

Signature: _____

Printed Name: _____

Title: _____

Date: _____



CONTRACTOR'S BID FOR PUBLIC WORK - FORM 96

State Form 52414 (R2 / 2-13) / Form 96 (Revised 2013)

Prescribed by State Board of Accounts

PART I

(To be completed for all bids. Please type or print)

Date (month, day, year): _____

1. Governmental Unit (Owner): _____

2. County : _____

3. Bidder (Firm): _____

Address: _____

City/State/ZIPcode: _____

4. Telephone Number: _____

5. Agent of Bidder (if applicable): _____

Pursuant to notices given, the undersigned offers to furnish labor and/or material necessary to complete the public works project of _____

(Governmental Unit) in accordance with plans and specifications prepared by _____

_____ and dated _____ for the sum of

_____ \$ _____

The undersigned further agrees to furnish a bond or certified check with this bid for an amount specified in the notice of the letting. If alternative bids apply, the undersigned submits a proposal for each in accordance with the notice. Any addendums attached will be specifically referenced at the applicable page.

If additional units of material included in the contract are needed, the cost of units must be the same as that shown in the original contract if accepted by the governmental unit. If the bid is to be awarded on a unit basis, the itemization of the units shall be shown on a separate attachment.

The contractor and his subcontractors, if any, shall not discriminate against or intimidate any employee, or applicant for employment, to be employed in the performance of this contract, with respect to any matter directly or indirectly related to employment because of race, religion, color, sex, national origin or ancestry. Breach of this covenant may be regarded as a material breach of the contract.

CERTIFICATION OF USE OF UNITED STATES STEEL PRODUCTS

(If applicable)

I, the undersigned bidder or agent as a contractor on a public works project, understand my statutory obligation to use steel products made in the United States (I.C. 5-16-8-2). I hereby certify that I and all subcontractors employed by me for this project will use U.S. steel products on this project if awarded. I understand that violations hereunder may result in forfeiture of contractual payments.

ACCEPTANCE

The above bid is accepted this _____ day of _____, _____, subject to the following conditions: _____

Contracting Authority Members:

_____	_____
_____	_____
_____	_____

PART II

(For projects of \$150,000 or more – IC 36-1-12-4)

Governmental Unit: _____

Bidder (Firm) _____

Date (month, day, year): _____

These statements to be submitted under oath by each bidder with and as a part of his bid.
Attach additional pages for each section as needed.

SECTION I EXPERIENCE QUESTIONNAIRE

1. What public works projects has your organization completed for the period of one (1) year prior to the date of the current bid?

Contract Amount	Class of Work	Completion Date	Name and Address of Owner

2. What public works projects are now in process of construction by your organization?

3. Have you ever failed to complete any work awarded to you? _____ If so, where and why?

4. List references from private firms for which you have performed work.

Contract Amount	Class of Work	Expected Completion Date	Name and Address of Owner
-----------------	---------------	--------------------------	---------------------------

SECTION II PLAN AND EQUIPMENT QUESTIONNAIRE

1. Explain your plan or layout for performing proposed work. *(Examples could include a narrative of when you could begin work, complete the project, number of workers, etc. and any other information which you believe would enable the governmental unit to consider your bid.)*

2. Please list the names and addresses of all subcontractors *(i.e. persons or firms outside your own firm who have performed part of the work)* that you have used on public works projects during the past five (5) years along with a brief description of the work done by each subcontractor.

3. If you intend to sublet any portion of the work, state the name and address of each subcontractor, equipment to be used by the subcontractor, and whether you will require a bond. However, if you are unable to currently provide a listing, please understand a listing must be provided prior to contract approval. Until the completion of the proposed project, you are under a continuing obligation to immediately notify the governmental unit in the event that you subsequently determine that you will use a subcontractor on the proposed project.

4. What equipment do you have available to use for the proposed project? Any equipment to be used by subcontractors may also be required to be listed by the governmental unit.

5. Have you entered into contracts or received offers for all materials which substantiate the prices used in preparing your proposal? If not, please explain the rationale used which would corroborate the prices listed.

SECTION III CONTRACTOR'S FINANCIAL STATEMENT

Attachment of bidder's financial statement is mandatory. Any bid submitted without said financial statement as required by statute shall thereby be rendered invalid. The financial statement provided hereunder to the governing body awarding the contract must be specific enough in detail so that said governing body can make a proper determination of the bidder's capability for completing the project if awarded.

SECTION IV CONTRACTOR'S NON – COLLUSION AFFIDAVIT

The undersigned bidder or agent, being duly sworn on oath, says that he has not, nor has any other member, representative, or agent of the firm, company, corporation or partnership represented by him, entered into any combination, collusion or agreement with any person relative to the price to be bid by anyone at such letting nor to prevent any person from bidding nor to include anyone to refrain from bidding, and that this bid is made without reference to any other bid and without any agreement, understanding or combination with any other person in reference to such bidding.

He further says that no person or persons, firms, or corporation has, have or will receive directly or indirectly, any rebate, fee, gift, commission or thing of value on account of such sale.

SECTION V OATH AND AFFIRMATION

I HEREBY AFFIRM UNDER THE PENALTIES FOR PERJURY THAT THE FACTS AND INFORMATION CONTAINED IN THE FOREGOING BID FOR PUBLIC WORKS ARE TRUE AND CORRECT.

Dated at _____ this _____ day of _____, _____

(Name of Organization)

By _____

(Title of Person Signing)

ACKNOWLEDGEMENT

STATE OF _____)
COUNTY OF _____) ss

Before me, a Notary Public, personally appeared the above-named _____ and
swore that the statements contained in the foregoing document are true and correct.

Subscribed and sworn to before me this _____ day of _____, _____.

Notary Public

My Commission Expires: _____

County of Residence: _____

BID OF

(Contractor)

(Address)

FOR

PUBLIC WORKS PROJECTS

OF

Filed _____, _____

Action taken _____

SECTION 00 45 00
EQUAL EMPLOYMENT OPPORTUNITY/AFFIRMATIVE ACTION PLAN
STATEMENT OF POLICY

It is the policy of this company, _____, to provide equal employment opportunity without regard to race, religion, color, national origin, handicap, age, or sex, through a program of positive action affecting all employees. In this program, our company carries out the requirements of Federal Executive Orders 11246 and 11375, Civil Rights Act of 1964, Equal Employment Act of 1972 and all other applicable laws and indicates its active support of the principle of equal opportunity in employment.

At present, _____% of our workforce are minorities and _____% of our workforce are females and we will attempt to utilize minorities and females through a positive, continuing program in all jobs for which we contract in the future.

Our company will utilize referrals from the Owner for use of lower income/poverty residents regarding any future job vacancies.

It is also our intent to make efforts to purchase supplies or equipment from small business concerns located in or owned in substantial part by the persons residing in the project area.

_____ is the official who will be responsible for implementing the above policy statement. _____ will be designated as the Equal Opportunity Officer in our company responsible for submission of all required equal employment opportunity documents. In addition, _____ is hereby authorized to sign the payrolls as well as our company's officers. (Note: If only officers will be authorized to sign payrolls, please fill in "no one" in the space.)

Federal I.D. Number

(Name of Organization)

(Title of Person Signing)

(Signature)

(Printed Name of Person Signing)

Dated this _____ day of _____, 20____

SECTION 00 45 00
CERTIFICATE AS TO CORPORATE PRINCIPAL
(When Principal is a Corporation)

I, _____, certify that I am the _____
of the corporation named as Principal in the Bond included within; that _____, who
signed said Bond on behalf of the Principal, was then _____ of said corporation; that I know
his/her signature, and his/her signature thereto is genuine; and that said Bond was duly signed, sealed and attested
to for and on behalf of said corporation by authority of its governing body.

_____ (SEAL)

SECTION 00 45 00
MBE/WBE CLAUSE CERTIFICATION

To be eligible for award of contract for above project(s), the bidders must execute and submit as a part of his/her bid, the following MBE/WBE Clause Certification which will be deemed a part of the resulting contract.

Warning: This certification is vital, and if not submitted, the Contractor's bid will be considered to be non-responsive. Similarly, if a false certification is submitted, the Contractor's bid will be considered to be non-responsive.

The Contractor agrees to use his good faith efforts as defined in the Owner's MBE/WBE plan, to utilize MBE/WBE firms in the award of his/her subcontracts and owner/operator work to the fullest extent with the suggested goals for this project. Under this MBE/WBE Clause Certification, the bidder agrees to maintain records to document contracts and specific efforts made to seek out and identify potential MBE/WBE contractors. The bidder agrees to make good faith effort to replace a MBE/WBE subcontractor, who is unable to perform successfully, with another MBE/WBE.

DEFINITIONS

For the purposes of this certification, the following terms are defined:

1. Minority: A person who is a citizen or lawful permanent resident of the United States and who is:
 - a. Black (a person having origins in any of the black racial groups of Africa).
 - b. Hispanic (a person of Spanish or Portuguese culture with origins in Mexico, South or Central America or the Caribbean Islands, regardless of race).
 - c. Asian American (a person having origins in any of the original peoples of the Far East, Southeast Asia, the India Subcontinent or the Pacific Islands).
 - d. American Indian and Alaskan Native (a person having origin in any of original peoples of North American).
 - e. Members of other groups or other individuals found to be socially disadvantaged by the Small Business Administration under Section 8(a) of Small Business Act as amended (15 U.S.C. 637(a)).
2. MBE/WBE: A business concern which is owned and controlled by one (1) more minority or woman owned enterprise.
 - a. Which is at least 51 per centum owned by one or more minorities or in the case of publicly owned business, at least 50 per centum of the stock of which is owned by one or more minorities and
 - b. Whose management and daily business operations are controlled by one or more such individuals.
 - c. In the case of a joint venture between a minority-controlled enterprise meeting the requirements (1) above and a non-minority controlled enterprise, the joint venture shall be found to be a minority contractor if the enterprise meeting the requirements of (1) above shall have more than one-half control over management of the project bid upon and shall have the right to receive more than one-half of the profit deriving from the project.

The Owner's suggested contract goal for MBE/WBE utilization on this contract is 10%.

These goals are established in accordance with Executive Orders 11246, 11625 (26 FR 1976), and 12432 so that "not less than Ten percent of the funds authorized to be appropriated under the Executive Order shall be expended with small business concerns owned and controlled by socially and economically disadvantaged individuals".

On all contracts, the bidder agrees to take affirmative actions to seek out and utilize MBE/WBE firms.

MBE/WBE CLAUSE CERTIFICATION (continued)

On contracts with suggested goals, the bidder must complete the "Schedule of Intended Participation by Minority/Woman Business Enterprise". If the MBE/WBE participation submitted on the form does not meet the contract goals, the bidder must complete the "Certification of Good Faith Efforts" form. Refer to attached forms (0030-10).

Name of Firm or Individual (Type or Print)

Corporate Seal

Business Address

Authorized Agent (Signature in Ink)

Title

Date at _____, _____ this _____ day of _____, 20____.
(city) (state)

MBE/WBE CLAUSE CERTIFICATION (continued)

SCHEDULE OF INTENDED PARTICIPATION BY
MINORITY/WOMAN BUSINESS ENTERPRISES

		Total Price	
NAME AND ADDRESS OF MINORITY FIRMS AND FEDERAL ID NO.	TYPE OF WORK	DOLLARS	CENTS
Total Amount to be Paid to MBE/WBE Firms			

Percent of total bid price including alternates which is to be paid to MBE/WBE firms for work performed, materials and/or supplies furnished under this contract: _____%

MBE/WBE CLAUSE CERTIFICATION (continued)

CERTIFICATE OF GOOD FAITH EFFORTS

Bidder has used his/her good faith efforts to use MBE/WBE firms as evidenced by the following actions taken. Check those which have been done:

- ☐ Bidder has attended pre-bid meetings that were scheduled by Owner to inform MBE/WBE firms of contracting and subcontracting opportunities.
- ☐ Bidder has advertised in general circulation, trade association or minority-focus media concerning subcontracting opportunities.
- ☐ Bidder has provided written notice to specific MBE/WBE firms that their interest in the contract was being solicited in sufficient time to allow MBE/WBE's to participate.
- ☐ Bidder has contacted MBE/WBE firms who expressed interest to determine with certainty whether they were in fact interested.
- ☐ Bidder has selected specific portions of the work to be performed for solicitation of MBE/WBE participation.
- ☐ Bidder has provided interested MBE/WBE firms with information about the plans, specifications and requirements of the project.
- ☐ Bidder has negotiated in good faith with interested MBE/WBE firms for specific portions of the work to be performed on this project.
- ☐ Bidder has made efforts to assist interested MBE/WBE firms in obtaining bonding, lines of credit or insurance required in order to perform work on this project.
- ☐ Bidder has used the services of minority community organizations, minority contractor groups or governmental minority business assistance offices.

Please describe any additional or other efforts bidder has taken which were used to obtain MBE/WBE participation in this contract.

The Representations, Certifications, and Other Statements of Bidders, HUD-5369-A (11/92), are hereby made a part of the Contract Documents, except as they may be modified by Section 00 80 00 SUPPLEMENTARY GENERAL CONDITIONS and the specific provisions of these documents.

Refer to insert:

HUD-5369-A (11/92) pages 1-3

**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 - Not Used

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)

**SECTION 00 45 00
NON-DEBARRED CERTIFICATION**

WATERFALL HIGH-RISE SECURITY UPGRADES
Elkhart Housing Authority
Elkhart, Indiana

Date: _____

Signature of: _____

Owner if Bidder is a Sole Proprietor
Partner if Bidder is a Partnership
Officer if Bidder is a Corporation

Name of Bidder's Company

Address

Location

This is to certify that the above signed Bidder is not nor has been debarred, suspended, or otherwise prohibited from contracting or entering into construction/modernization agreements with any Federal, State or Local Agency, including the U.S. Department of HUD.

**SECTION 00 45 00
PROPOSED SUBCONTRACTORS AND SUPPLIERS**

PROJECT _____

PRIME CONTRACTOR _____

Work to Perform	Subcontractor and Supplier Name, Address & Minority Status	Dollar Amount of Subcontract

**SECTION 00 45 00
PROPOSED WAGE RATE FOR
UNLISTED CLASSIFICATIONS**

	<u>Classification</u>	<u>Rate</u>	<u>Fringe</u>
1)			
2)			
3)			
4)			
5)			
6)			
7)			
8)			
9)			
10)			

SECTION 00 45 00
FROM PUBLIC LAW 110-690, NOV. 1988, TITLE 5,
DRUG-FREE WORKPLACE ACT OF 1988

DRUG-FREE WORKPLACE REQUIREMENTS FOR FEDERAL CONTRACTORS

A. Drug-Free Workplace Requirements:

1. Requirement for Persons Other Than Individuals - No person, other than an individual shall be considered a responsible source, under the meaning of such term as defined in section 4(8) of the Office of Federal Procurement Policy Act [41 U.S.C. 403(8)], for the purposes of being awarded a contract for the procurement of any property or services of a value of \$25,000 or more from any Federal agency unless such person has certified to the contracting agency that it will provide a drug-free workplace by:
 - a. publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited in the person's workplace and specifying the actions that will be taken against employees for violations of such prohibition;
 - b. establishing a drug-free awareness program to inform employees about:
 - i. the dangers of drug abuse in the workplace;
 - ii. the person's policy of maintaining a drug-free workplace;
 - iii. any available drug counseling, rehabilitation, and employee assistance programs;
 - and
 - iv. the penalties that may be imposed upon employees for drug abuse violations;
 - c. making it a requirement that each employee be engaged in the performance of such contract be given a copy of the statement required by subparagraph (a).
 - d. notifying the employee in the statement required by subparagraph (a), that as a condition of employment on such contract the employee will:
 - i. abide by the terms of the statement; and
 - ii. notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction;
 - e. notifying the contracting agency within 10 days after receiving notice under subparagraph (d), (ii), from an employee or otherwise receiving actual notice of such conviction;
 - f. imposing a sanction on, or requiring the satisfactory participation in a drug abuse assistance or rehabilitation program by any employee who is convicted as required by section 5154; and
 - g. making a good faith effort to continue to maintain a drug-free workplace through implementation of subparagraph (a), (b), (c), (d), (e), and (f).
2. Requirements for Individuals - No Federal agency shall enter into a contract with an individual unless such contract includes a certification by the individual that the individual will not engage in the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance in the performance of the contract.

B. Suspension, Termination, or Debarment of the Contractor.

1. Grounds for Suspension, Termination, or Debarment - Each contract awarded by a Federal agency shall be subject to suspension of payments under the contract or termination of the contract, or both, and the contractor thereunder or the individual who entered the contract with the Federal agency, as applicable, shall be subject to suspension or debarment in accordance with the requirements of this section if the head of the agency determines that:
 - a. the contractor or individual has made a false certification under subsection (A);
 - b. the contractor violates such certification by failing to carry out the requirements of subparagraph (a), (b), (c), (d), (e), or (f) of subsection (a), (l) or
 - c. such a number of employees of such contractor have been convicted of criminal drug statutes for violations occurring in the workplace as to indicate that the contractor has failed to make a good faith effort to provide a drug-free workplace as required by subsection (A).
2. Conduct of Suspension, Termination, and Debarment Proceedings.
 - a. if an contracting officer determines, in writing, that cause for suspension of payments, termination, or suspension or debarment exists, an appropriate action shall be initiated by a contracting officer of the agency, to be conducted by the agency concerned in accordance with Federal Acquisition Regulation and applicable agency procedures.
 - b. the Federal Acquisition Regulation shall be revised to include rules for conducting suspension and debarment proceedings under this subsection, including the rules providing notice the opportunity to respond in writing or in person, and such other procedures as may be necessary to provide a full and fair proceeding to a contractor or individual in such proceeding.
3. Effect of Debarment - Upon issuance of any final decision under this subsection requiring debarment of a contractor or individual, such contractor or individual shall be ineligible for award of any contract by any Federal agency, and for the participation in any future procurement by any Federal agency for a period specified in the decision not to exceed five (5) years.

Certification for a Drug-Free Workplace

Public reporting burden. Public reporting burden for this collection of information is estimated to average 0.25 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: U.S. Department of Housing and Urban Development, Office of the Chief Data Officer, R, 451 7th St SW, Room 8210, Washington, DC 20410-5000. Do not send completed forms to this address. This agency may not collect this information, and you are not required to complete this form, unless it displays a currently valid OMB control number. HUD is authorized to collect this information under the authority cited in the Notice of Funding Opportunity for this grant program. The information collected will provide proposed budget data for multiple programs. HUD will use this information in the selection of applicants. This information is required to obtain the benefit sought in the grant program. This information will not be held confidential and may be made available to the public in accordance with the Freedom of Information Act (5 U.S.C. §552).

Applicant Name

Program/Activity Receiving Federal Grant Funding

Acting on behalf of the above named Applicant as its Authorized Official, I make the following certifications and agreements to the Department of Housing and Urban Development (HUD) regarding the sites listed below:

I certify that the above named Applicant will or will continue to provide a drug-free workplace by:

a. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Applicant's workplace and specifying the actions that will be taken against employees for violation of such prohibition.

b. Establishing an on-going drug-free awareness program to inform employees ---

(1) The dangers of drug abuse in the workplace;

(2) The Applicant's policy of maintaining a drug-free workplace;

(3) Any available drug counseling, rehabilitation, and employee assistance programs; and

(4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace.

c. Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph a.;

d. Notifying the employee in the statement required by paragraph a. that, as a condition of employment under the grant, the employee will ---

(1) Abide by the terms of the statement; and

(2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;

e. Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph d.(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer or other designee on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification number(s) of each affected grant;

f. Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph d.(2), with respect to any employee who is so convicted ---

(1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or

(2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;

g. Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs a. thru f.

2. Sites for Work Performance. The Applicant shall list (on separate pages) the site(s) for the performance of work done in connection with the HUD funding of the program/activity shown above: Place of Performance shall include the street address, city, county, State, and zip code. Identify each sheet with the Applicant name and address and the program/activity receiving grant funding.)

Check here if there are workplaces on file that are not identified on the attached sheets.

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 Authorized Official		Title	
Signature		Date	
X			

form HUD-50070 (3/98)
ref. Handbooks 7417.1, 7475.13, 7485.1 & .3

**SECTION 00 52 00
FORM OF CONTRACT**

AGREEMENT made this _____ day of _____, in the year Two Thousand _____,
by and between _____, a corporation organized and existing
under the laws of the state of _____, a partnership consisting of _____,
or individual trading as _____, hereinafter called the
"Contractor" and _____
(Housing Authority/Commission's Name, Address, City, State & Zip], hereinafter called the "PHA".

WITNESSETH, That the Contractor and the PHA for the consideration stated herein mutually agree as follows:

ARTICLE 1. Statement of Work. The Contractor shall furnish all labor, material, equipment and services, and perform and complete all work required for the Elkhart Housing Authority, in strict accordance with the Specifications, Addenda thereto, and Drawings referred to therein, all as prepared by Alliance Architects and enumerated under Article 4 below, which said Specifications, Addenda and Drawings are incorporated herein by reference and made a part hereof.

ARTICLE 2. Contract Price. The PHA shall pay the Contractor for the performance of the Contract, in current funds, subject to additions and deductions as provided in the Specifications, the sum of _____ Dollars (\$ _____).

ARTICLE 3. Contract Time: The work shall be completed within _____ calendar days after the date of the Notice to Proceed issued to the Contractor by the Owner.

ARTICLE 4. Contract Documents. The contract shall consist of the following component parts:

- a. This Instrument
- b. Contractors Bid/Proposal and Bid Bond
- c. General Conditions of the Contract for Construction
- d. Special Conditions
- e. General Requirements
- f. Prevailing Wage Decision
- g. Technical Specifications
- h. Drawings
- i. Any and All Addenda

This instrument, together with the other documents enumerated in this Article 4, which said other documents are as fully a part of the Contract as if hereto attached or herein repeated, form the Contract. In the event that any provision in any component part of this Contract conflicts with any provision of any other component part, the provision of the component part first enumerated in this Article 4 shall govern, except as otherwise specifically stated. The various provisions in Addenda shall be construed in the order of preference of the component part of the Contract which each modifies.

ARTICLE 5. Liquidated Damages. The Contractor is responsible for completing the project within the time established in the Construction Contract as stipulated in Article 3 unless time extensions are authorized by the Architect and the Owner and documented via executed Change Order. If the work is not completed by the contract date, the Contractor shall be liable for liquidated damages resulting from such unexcused delays.

Liquidated damages shall be assessed at a rate not to exceed \$200.00 per day for each calendar day the contract time exceeds that set forth in Article 3 of the Agreement. These liquidated damages are payable to the Owner on demand and the Owner may, at its option, be paid from any retainage owed to Contractor on the Job, whether held in escrow or not, or retain the amount of such damages from any additional payments which Contractor is otherwise entitled to receive under this Agreement.

Liquidated damages shall reflect monetary losses by Owner as a result of the failure by Contractor to complete the work by the contract date. The Architect will review the total amount of liquidated damages being assessed and will advise both Owner and Contractor as to his opinion whether the amount of damages established by the Owner is reasonable.

Contractor agrees that the maximum liquidated damages amount established herein is reasonable. Contractor further agrees that it will pay assessed liquidated damages to Owner upon request together with Owner's costs of collection, including but not limited to its attorney's fees and expenses.

IN WITNESS WHEREOF, the parties hereto have caused This Instrument to be executed for three original counterparts as of the day and year first above written.

Attest:

(Contractor)

By: _____

Title:

Title: _____

(PRINT OR TYPE THE NAMES AND TITLES OF ALL SIGNATORIES)

Business Address:

(Street)

(City) (Zip Code)

CERTIFICATION

I, _____, certify that I am the _____ of the corporation named as Contractor herein; that _____, who signed said Contract on behalf of the Contractor was then _____ of said corporation; that I know this signature, and his signature thereto is genuine; and that said Contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate power.

(Corporate Seal)

ELKHART HOUSING AUTHORITY

By: _____
Erik Mathavan

Title: Comprehensive Improvements Director

Business Address:

1396 Benham Avenue
Elkhart, Indiana 46516

**SECTION 00 54 00
HOLD HARMLESS AGREEMENT**

The Housing Authority named below and _____ (Contractor) agree that, with regard to indemnification issues, the following language shall take precedence over any indemnification language contained within the Contract Document itself:

In addition to the PHA, its officers and agents, clause 2, article (d) and clause 16, article (j) of the HUD General Conditions, the Contractor shall defend, indemnify and hold harmless to the fullest extent permitted by law the Owner, Architect, Architect's Consultants, and Agents and Employees of any of them from any and all losses, costs, damages, liability and expenses including reasonable attorney fees in connection with claims or suits for damage to property and/or injury to persons, including death, alleged or claimed to have been caused by or through the performance of the work or operations incidental to the work, by the Contractor, his agents or employees, or by his subcontractors of any tier, their agents or employees, whether through negligence or willful act; and the Contractor shall at the request of the Owner and/or Architect undertake to investigate and defend any and all such claims or suits against the Owner, Architect, Architect's Consultants, and Agents and Employees of any of them. The indemnification obligation under the paragraph shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or its subcontractor under Worker's Compensation Acts, Disability Acts, or other Employee Benefit Acts.

ACCEPTED:

(Housing Authority/Commission Name)

(Contractor Name)

Signed: _____

Signed: _____

By: _____
(Printed Name)

By: _____
(Printed Name)

Title: _____

Title: _____

Date: _____

Date: _____

**SECTION 00 55 00
NOTICE TO PROCEED**

	Date: _____
	Project No.: _____
	Location: _____

RE:

Gentlemen:

Pursuant to terms of your contract, dated _____, 20_____, for the above-referenced project, you are hereby notified to commence work thereunder not later than _____, 20_____. The time for completion set forth in the contract is _____ calendar days, including the starting day, which establishes _____, 20_____, as the date by which Substantial Completion must be achieved.

Please note carefully and fulfill the requirements of the General Conditions relative to the submittal and approval of Workmen's Compensation, Manufacturer's and Contractor's Public Liability Insurance. This Notice is issued based upon the acceptability of the previously submitted documentation and certification outlined herein.

You are informed that _____ has been appointed Contracting Officer and is duly authorized to administer your contract for, and in the name of, this Housing Authority.

Promptly acknowledge receipt of this Notice by signing, dating and returning all copies promptly of this office.

Very Truly Yours,

HOUSING AUTHORITY

Enclosures

By: _____

Accepted:

Title: Executive Director

By: _____

ALLIANCE ARCHITECTS

Title: _____

Date: _____

By: _____

**Equal Employment
Opportunity Certification**
Excerpt From 41 CFR §60-1.4(b)

**U.S. Department of Housing
and Urban Development**
Office of Housing
Federal Housing Commissioner

Department of Veterans Affairs
OMB Control No. 2502-0029
(exp. 4/30/2020)

The applicant hereby agrees that it will incorporate or cause to be incorporated into any contract for construction work, or modification thereof, as defined in the regulations of the Secretary of Labor at 41 CFR Chapter 60, which is paid for in whole or in part with funds obtained from the Federal Government or borrowed on the credit of the Federal Government pursuant to a grant, contract, loan insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, the following equal opportunity clause:

During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin, such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.
- (3) The contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations and relevant orders of the Secretary of Labor.
- (5) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

- (6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction 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.
- (7) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) 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 subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: **Provided, however,** That in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work:

Provided, That if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and Federally-assisted construction contracts pursuant to the Executive order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed

Firm Name and Address

By

Title

upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

Excerpt from HUD Regulations

200.410Definition of term “applicant”.

- (a) In multifamily housing transactions where controls over the mortgagor are exercised by the Commissioner either through the ownership of corporate stock or under the provisions of a regulatory agreement, the term “applicant” as used in this subpart shall mean the mortgagor.
- (b) In transactions other than those specified in paragraph(a) of this section, the term “applicant” as used in this subpart shall mean the builder, dealer or contractor performing the construction, repair or rehabilitation work for the mortgagor or other borrower.

200.420Equal Opportunity Clause to be included in contracts and subcontracts.

- (a) The following equal opportunity clause shall be included in each contract and subcontract which is not exempt:

During the performance of this contract, the contractor agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for employment because of race, creed, color, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, creed, color, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of the nondiscrimination clause.

(2)The contractor will in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard race, creed, color, or national origin.

(3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided, advising the said labor union or workers’ representative of the contractor’s commitments under this section, and shall post copies of the notices in conspicuous places available to employees and applicants for employment.

(4) The contractor will comply with all provisions of Executive Order 10925 of March 6 1961, as amended, and of the regulations, and relevant orders of the President’s Committee on Equal Employment Opportunity created thereby.

(5) The contractor will furnish all information and reports required by Executive Order 10925 of March 6, 1961, as amended, and by the regulations, and orders of the said Committee, or pursuant thereto, and will permit access to his books, records, and accounts by HUD and the Committee for purposes of investigation to ascertain compliance with such regulations, and orders.

(6) In the event of the contractor’s non-compliance with the nondiscrimination clause of this contract or with any of the said regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or Federally-assisted construction contracts in accordance with procedures authorized in Executive Order 10925 of March 6, 1961, as amended, and such other sanctions may be imposed and remedies invoked provided in the said Executive Order or by regulations, or order of the President’s Committee on Equal Employment Opportunity, or as otherwise provided by law.

(7) The contractor will include the provisions of Paragraphs(1) through (7) in every subcontract or purchase order unless exempted by regulations, or orders of the President’s Committee on Equal Employment Opportunity issued pursuant to Section 303 of Executive Order 10925 of March 6, 1961, as amended, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase orders as HUD may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by HUD, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

- (b) Except in subcontracts for the performance of construction work at the site of construction, the clause is not required to be inserted in subcontracts below the second tier. Subcontracts may incorporate by referenced to the equal opportunity clause.

200.425Modification in and exemptions from the regulations in this subpart.

- (a) The following transactions and contracts are exempt from the regulations in this subpart:

(1) Loans, mortgages, contracts and subcontracts not exceeding \$10,000.

(2) Contract and subcontracts not exceeding \$100,000 for standard commercial supplies or raw material;

(3)Contracts and subcontracts under which work is to be or has been performed outside the United States and where no recruitment of workers within the United States is involved. To the extent that work pursuant to such contracts is done within the United States, the equal opportunity clause shall be applicable;

(4) Contracts for the sale of Government property where no appreciable amount of work is involved; and

(5) Contracts and subcontracts for an indefinite quantity which are not to extend for more than one year if the purchaser determines that the amounts to be ordered under any such contract or subcontract are not reasonably expected to exceed \$100,000 in the case of contracts or subcontracts for standard commercial supplies and raw materials, or \$10,000 in the case of all other contracts and subcontracts.

SECTION 00 62 00
SECTION 3 PLAN

1. Overview of Section 3 Requirements

A. WHAT IS SECTION 3?

Section 3 is a provision of the Housing and Urban Development Act of 1968 (12 U.S.C. 1701u) that is regulated by the provisions of 24 CFR 75. Section 3 regulations ensure that employment and other economic opportunities generated by certain HUD financial assistance shall, to the greatest extent feasible, and consistent with existing Federal, State and local laws and regulations, be directed to low- and very low-income persons, particularly those who are recipients of government assistance for housing, and to business concerns which provide economic opportunities to low- and very low-income persons.

B. PURPOSE OF THIS DOCUMENT

This plan outlines how the Housing Authority City of Elkhart (HACE) and its subrecipients, contractors and subcontractors will comply with HUD's Section 3 requirements in implementing HUD funded programs. Bidder will, to the greatest extent feasible, ensure that employment and other economic opportunities are directed to low- and very low-income persons (Section 3 workers and Targeted Section 3 workers) and to eligible businesses (Section 3 Businesses) and requires the same of its contractors.

Housing Authority City of Elkhart may amend its Section 3 Policies and Procedures document as necessary to ensure continued compliance with HUD's requirements and/or to reflect updated Section 3 guidance and outreach strategies.

C. APPLICABILITY

For public housing financial assistance, all funding is covered, regardless of the amount of expenditure or size of a contract. This plan applies to development assistance, operating funds, capital funds, and all mixed-finance development.

For housing and community development financial assistance, this plan applies to housing rehabilitation, housing construction, and other public construction projects that exceed \$200,000 or more of housing and community development financial assistance from one or more HUD programs. Applicability is determined at the project level.

For projects funded with Lead and Hazard Control and Healthy Homes Programs, this plan applies to projects that exceed \$100,000.

This plan also applies to projects that include multiple funding sources. Multiple funding source projects include projects that include public housing financial assistance, housing and community development financial assistance for single or multiple recipients, and the Lead Hazard Control and Healthy Homes Program.

Section 3 requirements **do not** apply to: 1) Material Supply Contracts - § 75.3(b), 2) Indian and Tribal Acknowledgments - § 75.3(c), and 3) Other HUD assistance and other Federal assistance not subject to Section 3 §75.3 (d). However, for financial assistance that is not subject to Section 3, recipients are encouraged to consider ways to support the purpose of Section 3.

SECTION 3 COORDINATOR

Housing Authority City of Elkhart Section 3 Coordinator serves as the central point of contact for Section 3 compliance for the PHA and its subrecipients, contractors and subcontractors supporting the program. Subrecipients, contractors, subcontractors and others are encouraged to reach out to the HACE Section 3 Coordinator with questions regarding Section 3 compliance:

Erik Mathavan
Director, Comprehensive Improvements
Erik.Mathavan@ehai.org

2. Employment, Training, and Contracting Goals

A. SAFE HARBOR COMPLIANCE

Bidder will be considered to have complied with the Section 3 requirements and met safe harbor, if they certify that they followed the required prioritization of effort and met or exceeded the Section 3 benchmarks, absent evidence of the contrary.

Prior to the beginning of work, contractors and subcontractors will be required to certify that they will follow the required prioritization of effort for Section 3 workers, Targeted Section 3 workers, and Section 3 business concerns as outlined below in Section C. After completion of the project, on the Section 3 Cumulative Report, contractors and subcontractors will be required to certify that they followed the prioritization of effort requirements.

If the contractor and subcontractor does not meet the safe harbor requirements, they must provide evidence that they have made qualitative efforts to assist low and very low-income persons with employment and training opportunities.

B. SAFE HARBOR BENCHMARKS

Bidder has established employment and training goals that subrecipients, contractors, and subcontractors should meet to comply with Section 3 requirements outlined in 24 CFR Part 75.9 - for public housing financial assistance. The safe harbor benchmark goals are as follows:

- 1) Twenty-five (25) percent or more of the total number of labor hours worked by all workers employed with public housing financial assistance in the PHA's fiscal year are Section 3 workers;

Section 3 Labor Hours/Total Labor Hours = 25%

And

- 2) Five (5) percent or more of the total number of labor hours worked by all workers employed with public housing financial assistance in the PHA's fiscal year are Targeted Section 3 workers, as defined at 24 CFR Part 75.11.

Targeted Section 3 Labor Hours/Total Labor Hours = 5%

HUD establishes and updates Section 3 benchmarks for Section 3 workers and/or Targeted Section 3 workers through a document published in the Federal Register, not less frequently than once every 3 years. Given that the Section 3 benchmarks are subject to change every three years or sooner, Housing Authority City of Elkhart will review and update the Section 3 Plan every 6 years/months, as needed.

It is the responsibility of contractors to implement efforts to achieve Section 3 compliance. Any contractor that does not meet the Section 3 benchmarks must demonstrate why meeting the benchmarks were not feasible. All contractors submitting bids or proposals to the Housing Authority City of Elkhart are required to certify that they will comply with the requirements of Section 3.

C. CERTIFICATION OF PRIORITIZATION OF EFFORT FOR EMPLOYMENT, TRAINING, AND CONTRACTING

EMPLOYMENT AND TRAINING

Under the HACE Section 3 Program, contractors and subcontractors should make best efforts to provide employment and training opportunities to Section 3 workers in the priority order listed below:

- 1) To residents of the public housing projects for which the public housing financial assistance is expended;
- 2) To residents of other public housing projects managed by the PHA that is providing the assistance or for residents of Section 8-assisted housing managed by the PHA;
- 3) To participants in YouthBuild programs; and
- 4) To low- and very low-income persons residing within the metropolitan area (or nonmetropolitan county) in which the assistance is expended.

Low and very low-income within Elkhart County, IN, is defined as residents within the following income levels for FY 2022 (Median Income = \$83,600):

[Table No. 1]

Income Limit Category	(1) Person	(2) Persons	(3) Persons	(4) Persons	(5) Persons	(6) Persons	(7) Persons	(8) Persons
Very Low (50%)	\$26,450	\$30,200	\$34,000	\$37,750	\$40,800	\$43,800	\$46,850	\$49,850
Extremely Low (30%)	\$15,900	\$18,310	\$23,030	\$27,750	\$32,470	\$37,190	\$41,910	\$46,630
Low (80%)	\$42,300	\$48,350	\$54,400	\$60,400	\$65,250	\$70,100	\$74,900	\$79,750

Income Limit figures are based on FY2022 Fair Market Rent (FMR). For a detailed account of how these limits are derived, please see our associated FY2022 FMR documentation.

CONTRACTING

Under the HACE Section 3 Program, contractors and subcontractors must make their best efforts to award contracts and subcontracts to business concerns that provide economic opportunities to Section 3 workers in the following order or priority:

- 1) Section 3 business concerns that provide economic opportunities for residents of public housing projects for which the assistance is provided;
- 2) Section 3 business concerns that provide economic opportunities for residents of other public housing projects or Section-8 assisted housing managed by the PHA that is providing assistance;
- 3) YouthBuild programs; and
- 4) Section 3 business concerns that provide economic opportunities to Section 3 workers residing within the metropolitan area (or nonmetropolitan county) in which the assistance is provided.

Contractors and subcontractors will be required to certify that they will and have made best efforts to follow the prioritization of effort requirements prior to the beginning work and after work is completed.

3. Section 3 Eligibility and Certifications

Individuals and businesses that meet Section 3 criteria may seek Section 3 acknowledgement from HACE or its contractors/subcontractors for training, employment, or contracting opportunities generated by public housing financial assistance. To qualify as a Section 3 worker, Targeted Section 3 worker, or a Section 3 business concern, each must self-certify that they meet the applicable criteria.

Businesses who misrepresent themselves as Section 3 business concerns and report false information to HACE may have their contracts terminated as default and be barred from ongoing and future considerations for contracting opportunities.

A. SECTION 3 WORKER AND TARGETED SECTION 3 WORKER CERTIFICATION

A Section 3 worker seeking certification shall submit self-certification documentation to the recipient contractor or subcontractor, that the person is a Section 3 worker or Targeted Section 3 worker as defined in 24 CFR Part 75. For the purposes of Section 3 worker eligibility, HACE will use individual income rather than family/household income to determine eligibility. The income limits will be determined annually using the guidelines published at <https://www.huduser.org/portal/datasets/il.html>.

Persons seeking the Section 3 worker acknowledgment shall demonstrate that it meets one or more of the following criteria currently or when hired within the past five years, as documented:

- 1) A low or very low-income resident (the worker's income for the previous or annualized calendar year is below the income limit established by HUD); or
- 2) Employed by a Section 3 business concern; or
- 3) A YouthBuild participant.

Persons seeking the Targeted Section 3 worker acknowledgment shall demonstrate that it meets one or more of the following criteria:

Employed by a Section 3 business concern or

- 1) Currently meets or when hired met at least one of the following categories as documented within the past five years:
 - a) A resident of public housing; or
 - b) A resident of other public housing projects or Section 8-assisted housing; or
 - c) A YouthBuild participant.

The individual must contact the Housing Authority City of Elkhart or developer from which they are seeking employment or contracting opportunities. They should identify themselves as a Section 3 worker or Targeted Section 3 worker and provide the documentation required for certification procedures.

Prospective Section 3 workers may self-certify that they meet the requirements as defined in the regulations.

There are many ways that a worker can be certified as either a Section 3 Worker or Targeted Section 3 Worker under 24 CFR part 75:

- (1) For a worker to qualify as a Section 3 worker, one of the following must be maintained:
 - (i) A worker's self-certification that their income is below the income limit from the prior calendar year;
 - (ii) A worker's self-certification of participation in a means-tested program such as public housing or Section 8-assisted housing;
 - (iii) Certification from a PHA, or the owner or property manager of project-based Section 8-assisted housing, or the administrator of tenant-based Section 8-assisted housing that the worker is a participant in one of their programs;

- (iv) An employer's certification that the worker's income from that employer is below the income limit when based on an employer's calculation of what the worker's wage rate would translate to if annualized on a full-time basis; or
 - (v) An employer's certification that the worker is employed by a Section 3 business concern.
- (2) For a worker to qualify as a Targeted Section 3 worker, one of the following must be maintained:
- (i) A worker's self-certification of participation in public housing or Section 8-assisted housing programs;
 - (ii) Certification from a PHA, or the owner or property manager of project-based Section 8-assisted housing, or the administrator of tenant-based Section 8-assisted housing that the worker is a participant in one of their programs;
 - (iii) An employer's certification that the worker is employed by a Section 3 business concern; or
 - (iv) A worker's certification that the worker is a YouthBuild participant.

The documentation must be maintained for the period required for record retentions in accordance with applicable program regulations or, in the absence of applicable program regulations, in accordance with 2 CFR § 200.334, Retention Requirements for Records (www.ecfr.gov/cgi-bin/retrieveECFR?n=se2.1.200_1334), which provides for retaining records for at least three years, as described in detail in that regulation. HACE or Bidder may report on Section 3 workers and Targeted Section 3 workers for five years from when their certification as a Section 3 worker or Targeted Section 3 worker is established.

HUD does not prescribe any specific forms of evidence to establish Section 3 eligibility. Acceptable documentation includes, but is not limited to the following:

- Proof of residency in a public housing project; or
- Evidence of participation in the YouthBuild program.

B. SECTION 3 BUSINESS CONCERN CERTIFICATION

Businesses that believe they meet the Section 3 Business requirements can/may self-register in the HUD Business registry, here: <http://www.hud.gov/Sec3Biz> as well as the HACE website here: <https://www.ehai.org/business-concern-certification---section-3.html>. Businesses may seek Section 3 Business Concern acknowledgment by demonstrating that it meets one or more of the following criteria:

- 1) At least 51 percent of the business is owned and controlled by low- or very low-income persons; or
- 2) At least 51 percent of the business is owned and controlled by current public housing residents or residents who currently live in Section 8-assisted housing; or
- 3) Over 75 percent of the labor hours performed for the business over the prior three-month period are performed by Section 3 workers.

Businesses that seek Section 3 acknowledgment shall certify, or demonstrate to the Housing Authority City of Elkhart, contractors, or subcontractors, that they meet the definitions provided in the above.

Businesses may demonstrate eligibility by submitting the Section 3 Business Concern Certification Form attached.

Section 3 Business Concern Certification Forms must be submitted at the time of bid/proposal. If the HACE previously approved the business concern to be Section 3 certified, then the certification can be submitted along with the bid, as long as the form is submitted within the prescribed expiration date. The Section 3 Business Concern Certification Form will expire after 12 months. Establishing a 12 month certification of eligibility period allows the HACE the ability to assess contractor performance to ensure the business is striving to meet the required goals.

SECTION 00 62 00
SECTION 3 COMPLIANCE AND BUSINESS CONCERN
ACKNOWLEDGMENT EXPLANATION

A. IS PARTICIPATION IN SECTION 3 OPTIONAL?

- Except for purchases or contracts solely for commodities and equipment, as a part of the solicitation the Housing Authority City of Elkhart (HACE) will offer all bidders and proposers the option of an Acknowledgement.
- In response to a competitive solicitation (quotes; bids; RFP's), bidders and proposers are not required to respond to the HACE with a claim of an Acknowledgement (meaning, such claim is optional and failure to respond with a claim of an Acknowledgement will not cause the bidder or proposer to be deemed non-responsive); however, if a bidder or proposer does claim an Acknowledgement, then the HACE will consider, investigate, and determine the validity of each such claim for a Acknowledgement.
- Regardless of whether or not a bidder or proposer claims an Acknowledgement in response to a solicitation, the recipient of the award will be required to, "to the greatest extent feasible," implement the requirements of Section 3 during the ensuing awarded contract term.

B. ACKNOWLEDGEMENT AWARD

- A Business which obtains the Business Concern Certification will be recognized for their outstanding effort and achievement amongst our community.
- Certification shall serve as a tiebreaker in the event of two or more firms equally qualified sharing the same lowest winning bid.
- To apply for Business Concern Certification, go to ehai.org, under Comprehensive Improvements, select Business Concern Certification - Section 3 or go to the following link:
<https://www.ehai.org/business-concern-certification---section-3.html>
 - o Certification form must be completed by time of sealed bid submission.

C. SECTION 3 COMPLIANCE & PROGRAM ACKNOWLEDGEMENT*

*(The following must be signed regardless of Business Concern certification/eligibility.)

I have read the Section 3 Plan provided. I am aware that an award as the result of this competitive solicitation, even though I may not receive a Acknowledgement from the HACE because of my Business Concern status, I am still required to, to the greatest extent feasible, provide training, employment, contracting and other economic opportunities to low and very low-income persons, especially recipients of government assistance for housing, and to businesses/subcontractors that provide economic opportunities to low and very low-income persons.

Whether or not I apply for Section 3 Business Concern Certification for Contracting, I may be required to provide HACE an estimate number of Section 3 Labor Hours to arise as a result of my business participation on this project.

Print Name: _____

Signature: _____

Date: _____

SECTION 00 62 00

Copies of this notice will be posted by the Contractor in conspicuous places available to employees and applicants for employment.

COPIES OF THIS NOTICE ARE TO BE FURNISHED BY THE CONTRACTOR TO LABOR UNIONS OR OTHER ORGANIZATIONS OR WORKERS, APPRENTICESHIP AND TRAINING PROGRAM SPONSORS, AND EMPLOYMENT REFERRAL AGENCIES.

NOTICE OF NONDISCRIMINATION IN EMPLOYMENT

TO: _____
(Employees of Contractor, union or organization of workers, employment referral agencies, and training program sponsors)

The undersigned currently holds, or represents contractors or subcontractors who currently hold, contract or subcontracts and may in the future bid on contracts or subcontracts which are subject to the provisions of Executive Orders 10925 of March 6, 1961, as amended, and 11114 of June 22, 1963 and 11246 as amended on September 25, 1965.

You are advised that, under the provisions of these contracts and in accordance with these Executive Orders, contractors and subcontractors are obliged to take affirmative action to provide equal employment opportunity without regard to race, creed, color, or national origin. This obligation includes, but is not limited to the following:

HIRING, PLACEMENT, UPGRADING, TRANSFER, OR DEMOTION, RECRUITMENT, ADVERTISING, OR SOLICITATION FOR EMPLOYMENT, TREATMENT DURING EMPLOYMENT RATES OR PAY OR OTHER FORMS OF COMPENSATION. SELECTION FOR TRAINING INCLUDING APPRENTICESHIP, LAYOFF OR TERMINATION.

This obligation extends, so far as the responsibility of the undersigned is concerned, to any arrangement under which journeymen or apprentices are selected and referred for work on its projects.

This notice is furnished you pursuant to the provisions of such contracts or subcontracts and Executive Orders 10925 and 11114 and 11246.

(Contractor or Subcontractor)

(Date)

**SECTION 00 62 00
SUBCONTRACTS AWARDED**

PROJECT _____

PRIME CONTRACTOR _____

		The Following are Required for all Subcontractors and Sub-Subcontractors		
Subcontractor & Supplier Name, Address, Tax I.D. Number & Minority Status	Dollar Amount of Subcontract	Request for Acceptance of Subcontractor Form	Non-Collusive Affidavit for Subcontractor	Certificate of Liability Insurance

SECTION 00 62 00
REQUEST FOR ACCEPTANCE OF SUBCONTRACTOR

Date: _____

TO: _____

Project No.: _____

(Project Name)

(Project Location)

In accordance with our prime Contract for _____ of this project, we request acceptance of the following proposed subcontractor to perform work and to supply material as indicated below:

1. _____
(Name)

(Street Address)	(City)	(State)	(Zip Code)
------------------	--------	---------	------------

2. Scope of work (state kind of work, if labor, or material, or both, and give Specification reference):

3. The subcontractor's non-collusive affidavit in the form required by our Contract is furnished herewith (original only, attached to the original of this request).

4. We warrant that the provisions required by our Contract with the Owner will be inserted in each subcontract for all of our subcontractors.

5. We certify that this proposed subcontractor is not ineligible to receive awards of contracts from the United States as evidenced by the lists of such contractors maintained by HUD.

6. There will be no assignment of interest in this subcontract except as follows (if none, so state):

7. Terms of payment: _____ Price: \$ _____

8. Remarks: _____

(Prime Contractor)

9. Federal ID # _____ By: _____

Title: _____

* If a sales agent, identity the manufacturer under "Remarks". If for a subcontractor, identify principal subcontractor under "Remarks".

ACCEPTANCE OR REJECTION

The proposed subcontractor named above is _____.

If accepted, the contracting party giving such acceptance assumes no responsibility in connection with the form or terms of the subcontract nor the performance of the subcontractor, and this form will not be returned.

If rejected, the reason(s) will be briefly stated herein, and this form will be returned within 10 days after receipt.

(Date)

(Contracting Officer)

(Subcontractor)

00 62 00-12

**Certificate from Contractor Appointing
Officer or Employee to Supervise
Payment of Employee**

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

Project Name _____ Date (mm/dd/yyyy) _____

Location _____ Project No. _____

(I) (We) hereby certify that (I am) (we are) (the prime contractor) (a subcontractor) for _____

(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 (Date: mm/dd/yyyy) _____ ;

That he/she 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 Statue which he/she is to execute with (my) (our) full authority and approval until such time as (I)

(we) submit to the (Name of Local Authority) _____

a new certificate appointing some other person for the purposes hereinabove stated.

(Identifying Signature of Appointee)

Attest (If required)

(Name of Firm or Corporation)

(Signature)

By _____
(Signature)

(Title)

(Title)

(Date: mm/dd/yyyy)

(Date: mm/dd/yyyy)

Note: This certificate must be execute 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 Statue.

SECTION 00 62 00
CONTRACTOR'S CERTIFICATION
CONCERNING EQUAL EMPLOYMENT OPPORTUNITY REQUIREMENTS

To: Assistant Regional Administrator
U.S. Dept. of Housing & Urban Dev.

Date: _____

Project No.: _____

Project Name: _____

Attn: Director, Compliance and Enforcement

The undersigned, having executed a contract with _____ for
_____ (nature of work) in the amount of \$ _____
in the construction of the above-identified project:

1. Certified that the applicable Bid Conditions and EEO Clause are included in the aforesaid contract.
2. Certifies that he was notified in writing, prior to beginning construction, of his respective obligations under Parts I and II of the Bid Conditions as applicable.
3. Agrees to include by reference the EEO Clause and applicable Bid Conditions in all advertisements or other solicitations for bids and shall include the EEO Clause and applicable Bid Conditions in all contracts.
4. Agrees to immediately report to the appropriate authority any refusal or failure of any subcontractor to fulfill his obligations under the Bid Conditions, including his reporting obligations.

Contractor

Printed Name & Title

By: _____

WARNING: U.S. Criminal Code, Section 1010, Title 18, U.S.C., "Federal Housing Administration Transactions" provides in part: "Whoever, for the purpose of ... influencing in any way the action of such Administration ... makes, passes, utters or publishes any statement, knowing the same to be false ... shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

SECTION 00 62 00
INSTRUCTIONS FOR PREPARATION
OF STATEMENT OF COMPLIANCE

This statement of compliance meets needs resulting from the amendment of the Davis-Bacon Act to include fringe benefits provisions. Under this amended law, the contractor is required to pay fringe benefits as predetermined by the Department of Labor, in addition to payment of the minimum rates. The contractor's obligation to pay fringe benefits may be met by payment of the fringes to the various plans, funds, or programs or by making these payments to the employees as cash in lieu of fringes.

The contractor should show on the face of his payroll all monies paid to the employees whether as basic rates or as cash in lieu of fringes. The contractor shall represent in the statement of compliance that he is paying to others fringes required by the contract and not paid as cash in lieu of fringes. Detailed instructions follow:

Contractors who pay all required fringe benefits:

A contractor who pays fringe benefits to approved plans, funds, or programs in amounts not less than were determined in the applicable wage decision of the Secretary of Labor shall continue to show on the face of his payroll the basic cash hourly rate and overtime rate paid to his employees, just as he has always done. Such a contractor shall check paragraph 4(a) of the statement to indicate that he is also paying to approved plans, funds, or programs not less than the amount predetermined as fringe benefits for each craft. Any exception shall be noted in Section 4(c).

Contractors who pay no fringe benefits:

A contractor who pays no fringe benefits shall pay to the employee and insert in the straight time hourly rate column of his payroll an amount not less than the predetermined rate for each classification plus the amount of fringe benefits determined for each classification in the applicable wage decision. Inasmuch as it is not necessary to pay time and a half on cash paid in lieu of fringes, the overtime rate shall be not less than the sum of the basic predetermined rate, plus the half time premium on the basic or regular rate plus the required cash in lieu of fringes at the straight time rate. To simplify computation of overtime, it is suggested that the straight time basic rate and cash in lieu of fringes be separately stated in the hourly rate column, thus \$3.25/.40. In addition, the contractor shall check paragraph 4(b) of the statement or indicate that he is paying fringe benefits in cash directly to his employees. Any exceptions shall be noted in Section 4(c).

Use of Section 4(c), Exceptions

Any contractor who is making payment to approved plans, funds, or programs in amounts less than the wage determination requires is obliged to pay the deficiency directly to the employees as cash in lieu of fringes. Any exceptions to Section 4(a) or 4(b), whichever the contractor may check, shall be entered in Section 4(c). Enter in the Exception column the craft, and enter in the Explanation column the hourly amount paid the employees as cash in lieu of fringes, and the hourly amount paid to plans, funds, or programs as fringes.

© U.S. GOVERNMENT PRINTING OFFICE: 1968 0-367-341

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402 - Price \$1.25 per pad of 100

STATEMENT OF COMPLIANCE

Date _____

I, _____, _____ Do hereby state:
(Name of signatory party) (Title)

(1) That I pay or supervise the payment of the persons employed by _____ on the _____
(Contractor or Subcontractor)

that during the payroll period commencing on the ____ day of _____, 20____, all persons employed on said project have been paid the full weekly wages earned that no rebates have been or will be made either directly or indirectly to or on behalf on said _____
(Contractor or Subcontractor)

from the full weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 CFR Subtitle A), issued by the Secretary of Labor under the Copeland Act as Amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. 276c). and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ In addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll payments of fringe benefits as listed in the contract have been or will be made to appropriated programs for the benefit of such employees, except as noted in Section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☐ Each Laborer or mechanic listed in the above referenced payroll has been paid as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in Section 4(c) below.

(c) EXCEPTIONS

EXCEPTIONS (CRAFT)	
Remarks	
Name and Title	Signature
The wilful falsification of any of the above statements may subject the contractor or subcontractor to civil or criminal prosecution. See Section 1001 of title 18 and Section 231 of title 31 of the United States code.	

Form WH-348 (1/68) Purchase this form directly from the Supt. Of Documents

U.S. DEPARTMENT OF LABOR
WAGE AND HOUR DIVISION
INSTRUCTIONS FOR COMPLETING PAYROLL FORM, WH-347

General: The use of the WH-347 payroll form is not mandatory. This form has been made available for the convenience of contractors and subcontractors required by their Federal or Federally-aided construction-type contracts and subcontracts to submit weekly payrolls. Properly filled out, this form will satisfy the requirements of Regulations, Parts 3 and 5 (29 CFR, Subtitle A), as to payrolls submitted in connection with contracts subject to the Davis-Bacon and related Acts.

This form meets needs resulting from the amendment of Davis-Bacon Act to include fringe benefits provisions. Under this amended law, the contractor is required to pay not less than fringe benefits as predetermined by the Department of Labor, in addition to payment of not less than the predetermined rates. The contractor's obligation to pay fringe benefits may be met either by payment of the fringes to the various plans, funds or programs or by making these payments to the employees as cash in lieu of fringes.

This payroll provides for the contractor's showing on the face of the payroll all monies to the employees, whether as basic rates or as cash in lieu of fringes and provides for the contractor's representation in the statement of compliance on the rear of the payroll that he is paying to other fringes required by the contract and not paid as cash in lieu of fringes. Detailed instructions concerning the preparation of the payroll follow:

Contractor or Subcontractor: Fill in your firm's name and check appropriate box.

Address: Fill in your firm's address.

Column 1 - Name, Address, and Social Security number of Employee: The employee's full name must be shown on each weekly payroll submitted. The employee's address must also be shown on the payroll covering the first week in which the employee works on the project. The address need not be shown on subsequent weekly payrolls unless his address changes. Although not required by Regulations, Parts 3 and 5, space is available in the name and address section so that Social Security numbers may be listed.

Column 2 - Withholding Exemptions: This column is merely inserted for the employer's convenience and is not a requirement of Regulations, Part 3 and 5.

Column 3 - Work Classifications: List classification descriptive of work actually performed by employees. Consult classification and minimum wage schedule set forth in contract specifications. If additional classifications are deemed necessary, see Contracting Officer or Agency representative. Employee may be shown as having worked in more than one classification provided accurate breakdown or hours so worked is maintained and shown on submitted payroll by use of separate entries.

Column 4 - Hours worked: On all contracts subject to the Contract Work Hours Standard Act enter as overtime hours worked in excess of 8 hours per day and 40 hours a week.

Column 5 - Total: Self-explanatory

Column 6 - Rate of Pay, including Fringe Benefits: In straight time box, list actual hourly rate paid the employee for straight time worked plus in cash in lieu of fringes paid the employee. When recording the straight time hourly rate, any cash paid in lieu of fringes may be shown separately from the basic rate, thus \$3.25/.40. This is of assistance in correctly computing overtime. See "Fringe Benefits" below. In overtime box shown overtime hourly rate paid, plus any cash in lieu of fringes paid the employee. See "Fringe Benefits" below. Payment of not less than time and one-half the basic or regular rate paid is required for overtime under the Contract Work Hours Standard Act of 1962. In addition to paying no less than the predetermined rate for the classification which the employee works, the contractor shall pay to approved plans, funds or programs or shall pay as cash in lieu of fringes amounts predetermined as fringe benefits in the wage decision made part of the contract. See "FRINGE BENEFITS" below.

FRINGE BENEFITS - Contractors who pay all required fringe benefits: A contractor who pays fringe benefits to approved plans, funds, or programs in amounts not less than were determined in the applicable wage decision of the Secretary of Labor shall continue to show on the face of the payroll the basic cash hourly rate and overtime rate paid to his employees just as he has always done. Such a contractor shall check paragraph 4(a) of the statement on the reverse of the payroll to indicate that he is also paying to approved plans, funds or programs not less than the amount predetermined as fringe benefits for each craft. Any exceptions shall be noted in section 4(c).

Contractors who pay no fringe benefits: A contractor who pays no fringe benefits shall pay to the employee, and insert in the straight time hourly rate column of the payroll, an amount not less than the predetermined rate for each classification plus the amount of fringe benefits determined for each classification in the applicable wage decision. Inasmuch as it is not necessary to pay time and a half on cash paid in lieu of fringes, the overtime rate shall be not less than the sum of the basic predetermined rate, plus the half time premium on basic or regular rate, plus the required cash in lieu of fringes at the straight time rate. In addition, the contractor shall check paragraph 4(b) of the statement on the reverse of the payroll to indicate that he is paying fringe benefits in cash directly to his employees. Any exceptions shall be noted in Section 4(c).

Use of Section 4(c), Exceptions

Any contractor who is making payment to approved plans, funds, or programs in amounts less than the wage determination requires is obliged to pay the deficiency directly to the employees as cash in lieu of fringes. Any exceptions to Section 4(a) or 4(b), whichever the contractor may check, shall be entered in section 4(c). Enter in the Exception column the craft, and enter in the Explanation column the hourly amount paid the employee as cash in lieu of fringes and the hourly amount paid to plans, funds, or programs as fringes. The contractor shall pay, and shall show that he is paying to each such employee for all hours (unless otherwise provided by applicable determination) worked on Federal or Federally assisted project an amount not less than the predetermined rate plus cash in lieu of fringes as shown in Section 4(c). The rate paid and amount of cash paid in lieu of fringe benefits per hour should be entered in column 6 on the payroll. See paragraph on "Contractors who pay no fringe benefits" for computation of overtime rate.

Column 7 - Gross Amount Earned: Enter gross amount earned on this project. If part of the employees' weekly wage was earned on projects other than the project described on this payroll, enter in column 7 first the amount earned on the Federal or Federally assisted project and then the gross amount earned during the week on all projects, thus \$63.00/\$120.00.

Column 8 - Deductions: Five columns are provided for showing deductions made. If more than five deduction should be involved, use first 4 columns; show the balance deductions under "Other" column; show actual total under "Total Deductions" column: and in the attachment to the payroll describe the deduction contained in the "Other" column. All deductions must be in accordance with the provisions of the Copeland Act Regulations, 29 CFR, Part 3. If the employee worked on other jobs in addition to this project, show actual deductions from his weekly gross wage, but indicate that deductions are based on his gross wages.

Column 9 - Net Wages Paid for Week: Self-explanatory

Totals - Space has been left at the bottom of the columns so that totals may be shown if the contractor so desires.

Statement Required by Regulations, Parts 3 and 5: While this form need not be notarized, the statement on the back of the payroll is subject to the penalties provided by 18 USC 1001, namely, possible imprisonment of 5 years or \$10,000.00 fine or both. Accordingly, the party signing this statement should have knowledge of the facts represented as true.

Space has been provided between item (1) and (2) of the statement for describing any deductions made. If all deductions made are adequately described in the "Deductions" column above, state "See Deductions column in this payroll." See paragraph entitled "FRINGE BENEFITS" above for instructions concerning filling out paragraph 4 of the statement.

[illegible]

While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 3.5(a). The Copeland Act (29 U.S.C. § 3145) requires contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to ensure that employees have been legally required wages and fringe benefits.

We estimate that it will take an average of 55 minutes to complete this collection, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W.

Date _____

I, _____ (Name of Signatory Party) _____ (Title)
do hereby state:

(1) That I pay or supervise the payment of the persons employed by _____ on the _____
(Contractor or Subcontractor)
_____ (Building or Work); that during the payroll period commencing on the _____ day of _____, _____, and ending the _____ day of _____, _____, all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said _____

_____ (Contractor or Subcontractor) _____ from the full weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967, 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:
(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ — in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☐ — Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 3729 OF TITLE 31 OF THE UNITED STATES CODE.	

SECTION 00 62 00
INSTRUCTIONS FOR FILING MONTHLY EMPLOYMENT UTILIZATION REPORT (CC-257)

The Monthly Utilization Report is to be completed by each subject contractor (both prime and sub) and signed by a responsible official of the company. The reports are to be filed by the 5th day of each month during the term of the contract, and they shall include the total work-hours for each employee classification in each trade in the covered area for the monthly reporting period. The prime contractor shall submit a report for its aggregate work force and collect and submit reports for each subcontractor's aggregate work force to the Federal compliance agency that has Executive Order 11246 responsibility. (Additional copies of this form may be obtained from the U.S. Department of Labor, Employment Standards Administration, OFCCP's regional office for your area.)

Compliance Agency	U.S. Government agency assigned responsibility for equal employment opportunity. (Secure this information from the contracting officer.)
Federal Funding Agency	U.S. Government agency funding project (in whole or in part). If more than one agency list all.
Contractor	Any contractor who has a construction contract with the U.S. Government of a contract funded in whole or in part with Federal funds.
Minority	Includes Blacks, Hispanics, American Indians, Alaskan Natives, and Asian and Pacific Islanders - both men and women.
1. Covered Area	Geographic area identified in Notice required under 41 CFR 60-4.2.
2. Employer's identification Number	Federal Social Security Number used on Employer's Quarterly Federal Tax Return (U.S. Treasury Department Form 941).
3. Current Goals (Minority & Female)	See contract Notification.
4. Reporting Period	Monthly, or as directed by the compliance agency, beginning with the effective date of the contract.
5. Construction Trade	Only those construction crafts which contractor employees in the covered area.
6. Work-Hours of Employment (a-b)	a. The total number of male hours and the total number of female hours worked by employees in each classification. b-a. The total number of male hours and the total number of female hours worked by each specified group of minority employees in each classification.
Classification	The level of accomplishment or status of the worker in the trade (Journey Worker, Apprentice, Trainee)
7. Minority Percentage	The percentage of total minority work-hours of all work-hours (the sum of columns 6b, 6c, 6d, and 6e divided by column 6a; just one figure for each construction trade).
8. Female Percentage	For each trade the number reported in 6a. F divided by the sum of the numbers reported in 6a. M and F.
9. Total Number of Employees	Total number of male and total number of female employees working in each classification of each trade in the contractor's aggregate work force during reporting period.
10. Total Number of Minority Employees	Total number of male minority employees and total number of female minority employees working in each classification in each trade in the contractor's aggregate work force during reporting period.

Monthly Employment Utilization Report

U.S. Department of Labor Employment Standards Administration Office of Federal Contract Compliance Programs

This report is required by Executive Order 11246, Sec. 203. Failure to report can result in contracts being cancelled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts of federally assisted construction contracts.										OMB No. 1215-01633 Expires: 12/13/92	
3. Current Goals Minority Female 6.9%				4. Reporting Period From _____ To _____				1. Covered Area (SMSA or EA)		2. Employers I.D. No.	
5. CONSTRUCTION TRADE				6. TOTAL FEDERAL & NON-FEDERAL CONSTRUCTION WORK HOURS				9. Total Number of Employees		10. Total Number of Minority Employees	
6a. Total All Employees By Trade				6b. Black (Not of Hispanic Origin)		6c. Hispanic		6d. Asian or Pacific Islander		6e. American Indian or Native American	
M F				M F		M F		M F		M F	
7. Minority Percentage				8. Female Percentage							
Journey Worker											
Apprentice											
Trainee											
Sub-Total											
Journey Worker											
Apprentice											
Trainee											
Sub-Total											
Journey Worker											
Apprentice											
Trainee											
Sub-Total											
Journey Worker											
Apprentice											
Trainee											
Sub-Total											
Journey Worker											
Apprentice											
Trainee											
Sub-Total											
Journey Worker											
Apprentice											
Trainee											
Sub-Total											
Journey Worker											
Apprentice											
Trainee											
Sub-Total											
Total Journey Worker											
Total Apprentices											
Total Trainees											
Grand Total											
11. Company Official's Signature and Title								12. Telephone Number (include area code)		13. Date Signed	
										Page of	

Application and Certificate for Payment

TO OWNER:

PROJECT:

APPLICATION NO:

DISTRIBUTION TO:

PERIOD TO:

OWNER ☐

FROM CONTRACTOR:

VIA ARCHITECT:

CONTRACT FOR:

ARCHITECT ☐

CONTRACT DATE:

CONTRACTOR ☐

PROJECT NOS:

FIELD ☐

OTHER ☐

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract. AIA Document G703®, Continuation Sheet, is attached.

1. ORIGINAL CONTRACT SUM \$

2. NET CHANGE BY CHANGE ORDERS \$

3. CONTRACT SUM TO DATE (Line 1 ± 2) \$

4. TOTAL COMPLETED & STORED TO DATE (Column G on G703) \$

5. RETAINAGE:

a. % of Completed Work (Columns D + E on G703) \$

b. % of Stored Material (Column F on G703) \$

Total Retainage (Lines 5a + 5b, or Total in Column I of G703) \$

6. TOTAL EARNED LESS RETAINAGE \$

(Line 4 minus Line 5 Total)

7. LESS PREVIOUS CERTIFICATES FOR PAYMENT \$

(Line 6 from prior Certificate)

8. CURRENT PAYMENT DUE \$

9. BALANCE TO FINISH, INCLUDING RETAINAGE (Line 3 minus Line 6)

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner	\$	\$
Total approved this month	\$	\$
TOTAL	\$	\$
NET CHANGES by Change Order	\$	

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR:

By: _____ Date: _____

State of: _____

County of: _____

Subscribed and sworn to before me this _____ day of _____

Notary Public: _____

My commission expires: _____

ARCHITECT'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising this application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED \$

(Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation Sheet that are changed to conform with the amount certified.)

ARCHITECT:

By: _____ Date: _____

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

Continuation Sheet

AIA Document G702®-1992, Application and Certificate for Payment, or G732™-2009, Application and Certificate for Payment, Construction Manager as Adviser Edition, containing Contractor's signed certification is attached.

In tabulations below, amounts are in US dollars.

Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO:

APPLICATION DATE:

PERIOD TO:

ARCHITECT'S PROJECT NO:

A	B	C	D	E	F	G		H	I
ITEM NO.	DESCRIPTION OF WORK	SCHEDULED VALUE	WORK COMPLETED		MATERIALS PRESENTLY STORED (Not in D or E)	TOTAL COMPLETED AND STORED TO DATE (D+E+F)	% (G ÷ C)	BALANCE TO FINISH (C - G)	RETAINAGE (If variable rate)
			FROM PREVIOUS APPLICATION (D + E)	THIS PERIOD					
	GRAND TOTAL								

**SECTION 00 62 00
CONTRACTOR'S CERTIFICATION**

Date

(Name)
Executive Director
(Housing Authority)
(Street Address)
(City, State, Zip Code)

Re: (Title of Project)
(Project Location)
(Project No.)

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 process of the payment covered by this certification; in accordance with subcontractor 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 accordance with the terms and conditions of the subcontract.

Company

Name

Title

Date

**SECTION 00 62 00
AFFIDAVIT AND WAIVER OF LIEN**

_____ FINAL _____ PARTIAL

STATE OF _____ }
 } SS:
COUNTY OF _____ }

_____ being duly sworn states that he is the _____ of
_____ having contracted with _____
_____ to furnish _____ for a project known
as _____, located at _____,
owned by _____ and does further state:

Partial Waiver: That the balance due from the Owner is the sum of _____
_____ dollars (\$ _____)

_____ Receipt of which is hereby acknowledged.

Final Waiver: That the final balance due from the Owner is the sum of _____
_____ dollars (\$ _____)

_____ Receipt of which is hereby acknowledged.

Therefore, the undersigned waives and releases unto the Owner of said premises any and all lien or claim whatsoever on the above-described property and improvements thereon on account of labor and material or both, furnished by the undersigned thereto, and further certifies that no other party has any claim or right to a lien on account of any work performed or material furnished to the undersigned for said project, and within the scope of this affidavit and waiver.

COMPANY NAME

Signature

Title

ACKNOWLEDGMENT

STATE OF _____)
) SS:
COUNTY OF _____)

Before me, a Notary Public, personally appeared the above-named and swore that the statements contained in the foregoing document are true and correct.

Subscribed and sworn to me this _____ day of _____, 20____

Notary Public Signature

My Commission Expires: _____

I, (name) , President of (company name) , certify that all work has been completed in accordance with the terms and Contract Documents for the (type of work as stated in Contract) at (address) by (company name) and further state that, to the best of my knowledge and belief, all claims for materials, labor and equipment, or any work performed by subcontractors, have been fully paid.

00 64 00-1

**SECTION 00 64 00
CONTRACTOR'S CERTIFICATE OF GUARANTEE**

Date _____

(Name)
Executive Director
(Housing Authority)
(Street Address)
(City, State, Zip Code)

Re: (Title of Project)
(Project Location)
(Project No.)

Dear _____

In accordance with the Contract Documents for the above-referenced project, we as the General Contractor do herein guarantee the following:

1. All materials, equipment and workmanship are as specified and/or shown on the drawings or as amended by change orders, field orders or contract modifications.
2. If in the course of one year (or other extended time as specified) from the date of substantial completion, the materials, equipment or workmanship fails to perform in a satisfactory manner, we will correct, repair or replace said materials, equipment or workmanship to perform in a satisfactory manner.
3. Notifications to correct, repair or replace shall be from the Owner, in writing to the Contractor.
4. Failure to take appropriate action within seven (7) days after written notification shall be automatic authorization for the Owner to have the corrections made at the expense of the undersigned.

ATTEST: _____
(Signature of an officer of the Contractor)

(Type name and title of signatory)

(Type name of company)

State of: _____, County of: _____

ACKNOWLEDGMENT

STATE OF _____)
COUNTY OF _____) SS:

Before me, a Notary Public, personally appeared the above-named and swore that the statements contained in the foregoing document are true and correct.

Subscribed and sworn to me this _____ day of _____, 20____

Notary Public Signature

My Commission Expires: _____

**SECTION 00 64 00
LETTER OF RELEASE**

Date _____

(Name)
Executive Director
(Housing Authority)
(Street Address)
(City, State, Zip Code)

Re: (Title of Project)
(Project Location)
(Project No.)

Dear _____

As per HUD requirements (7460.8, Rev.-1 1/93) we hereby release and certify to the following:

1. The work has been completed in accordance with the Contract Documents (drawings and specifications) including all modifications, field orders and change orders.
2. The total and final amount of the Construction Contract is \$_____ (original Contract plus all change orders).
3. The final payment that is due under this Contract is \$_____, and there are no separately stated amounts of any unpaid bills or unsettled claims against the Public Housing Authority or its agents.
4. The Public Housing Authority is herein released of all claims except the final payment.
5. Wages paid to laborers and mechanics were consistent with the wage rate requirements of the Contract and there are no outstanding claims for unpaid wages.

ATTEST: _____
(Signature of an officer of the Contractor)

(Type name and title of signatory)

(Type name of company)

State of _____, County of _____

ACKNOWLEDGMENT

STATE OF _____)
COUNTY OF _____) SS:

Before me, a Notary Public, personally appeared the above-named and swore that the statements contained in the foregoing document are true and correct.

Subscribed and sworn to me this _____ day of _____, 20____

Notary Public Signature

My Commission Expires: _____



AIA[®] Document G707[™] – 1994

Consent of Surety to Final Payment

PROJECT: *(Name and address)*

ARCHITECT'S PROJECT NUMBER:

OWNER ☐

CONTRACT FOR:

ARCHITECT ☐

CONTRACTOR ☐

TO OWNER: *(Name and address)*

CONTRACT DATED:

SURETY ☐

OTHER ☐

In accordance with the provisions of the Contract between the Owner and the Contractor as indicated above, the
(Insert name and address of Surety)

on bond of
(Insert name and address of Contractor)

, SURETY,

hereby approves of the final payment to the Contractor, and agrees that final payment to the Contractor shall not relieve
the Surety of any of its obligations to
(Insert name and address of Owner)

, CONTRACTOR,

as set forth in said Surety's bond.
as set forth in said Surety's bond.

, OWNER,

IN WITNESS WHEREOF, the Surety has hereunto set its hand on this date:
(Insert in writing the month followed by the numeric date and year.)

(Surety)

(Signature of authorized representative)

Attest:
(Seal)

(Printed name and title)

CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.

SECTION 00 64 00
FORM OF CONTRACTOR'S CERTIFICATE AND RELEASE

FROM: _____ (name of contractor)

TO: _____ (name of owner)

REFERENCE: CONTRACT NO. _____ ENTERED INTO THE _____ DAY
OF _____, 20____, BETWEEN THE

(name of Owner)

OF _____ (city) _____ (state),

HEREINAFTER CALLED THE PHA

AND _____ (name of Contractor)

OF _____ (city) _____ (state)

HEREINAFTER CALLED THE CONTRACTOR,

FOR THE _____ (type of construction)

OF _____ (name of project), PROJECT NO. _____,

LOCATED IN _____ (city) _____ (state).

KNOW ALL MEN BY THESE PRESENTS:

1. The undersigned hereby certifies that there is due and payable under the Contract and duly approved Change Orders and modifications the undisputed balance of \$_____.
2. The undersigned further certifies that, in addition to the amount set forth in paragraph 1 hereof, there are outstanding and unsettled the following items which he claims are just and due and owing by the PHA to the Contractor:
 - (a) _____
 - (b) _____
 - (c) _____(Itemized claims and amounts claimed. If none, so state.)
3. The undersigned further certifies that all work required under this Contract including work required under Change Order numbered _____ has been performed in accordance with the terms thereof, and that there are no claims of laborers or mechanics for unpaid wages arising out of the performance of this Contract, and that the wage rates paid by the Contractor and all subcontractors were in conformity with the Contract provisions relating to said wage rates.

4. The undersigned further certifies that all subcontractors and material suppliers (of whatever tier) have been fully paid and that they have no claims under the Contract, except:

Name

Amount

- (a)
(b)
(c)

5. Except for the amount stated in paragraphs 1 and 2 hereof, the undersigned has received from the PHA all sums of money payable to the undersigned under or pursuant to the aforementioned Contract or any change or modification hereof.
6. That in consideration of the payment of the amount stated in paragraph 1 hereof, the undersigned does hereby release the PHA from any and all claims arising under or by virtue of this Contract except the amounts listed in paragraph 2 hereof; provided, however, that if for any reason the PHA does not pay in full the amount stated in paragraph 1 hereof, said deduction shall not affect the validity of this release, but the amount so deducted shall be automatically included under paragraph 2 as an amount which the Contractor has not released but will release upon payment thereof. The Contractor further certifies that, upon payment of the amounts listed in paragraph 2 hereof, and of any amount which may be deducted from paragraph 2 hereof, he will release the PHA from any and all claims of any nature whatsoever arising out of said Contract or modification thereof, and will execute such further releases of assurances as the PHA may request.

IN WITNESS WHEREOF, the undersigned has signed and sealed this instrument this _____ day of _____, 20____.

Name of Contractor (SEAL)

Signature and Title of Officer

_____, being first duly sworn on oath, deposes and says, first, that he is
(Affiant)

the _____ of the _____, and second, that he has read
(Title) (Name of Contractor)

the foregoing Certificate and Release by him subscribed as _____ of the
(Title)

(Name of Contractor)

**SECTION 00 70 00
GENERAL CONDITIONS**

THE GENERAL CONDITIONS FOR CONSTRUCTION CONTRACTS - PUBLIC HOUSING PROGRAMS, HUD-5370 (1/2014), ARE HEREBY MADE A PART OF THE CONTRACT DOCUMENTS, EXCEPT AS THEY MAY BE MODIFIED BY SECTION 00 80 00 SUPPLEMENTARY GENERAL CONDITIONS AND THE SPECIFIC PROVISIONS OF THESE DOCUMENTS

REFER TO INSERT:

HUD-5370 (1/2014), PAGES 1-19

END OF SECTION

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

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 a 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.

**SECTION 00 80 00
SUPPLEMENTARY GENERAL CONDITIONS**

SUPPLEMENTS

1.01 SUPPLEMENTS

- A. The following Supplements add to the "General Conditions for Construction Contracts" (HUD-5370, 01/2013). Where any article, paragraph, sub-paragraph, or clause of the General Conditions is modified or deleted by these supplements, the unaltered provisions shall remain in effect.

1.02 CONTRACTOR'S RESPONSIBILITY FOR WORK

- A. In addition to the PHA, its officers and agents, clause 2, article (d) and clause 16, article (j) of the HUD General Conditions, the Contractor shall defend, indemnify and hold harmless to the fullest extent permitted by law the Owner, Architect, Architect's Consultants, and Agents and Employees of any of them from any and all losses, costs, damages, liability and expenses including reasonable attorney fees in connection with claims or suits for damage to property and/or injury to persons, including death, alleged or claimed to have been caused by or through the performance of the work or operations incidental to the work, by the Contractor, his agents or employees, or by his subcontractors of any tier, their agents or employees, whether through negligence or willful act; and the Contractor shall at the request of the Owner and/or Architect undertake to investigate and defend any and all such claims or suits against the Owner, Architect, Architect's Consultants, and Agents and Employees of any of them. The indemnification obligation under the paragraph shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or its subcontractor under Worker's Compensation Acts, Disability Acts, or other Employee Benefit Acts.
- B. Refer to Hold Harmless Agreement, Form 00540-1.

1.03 DISPUTES

- A. Clause 31, disputes paragraph (e), page 10 of 18, shall be changed to read as follows:
 "(e) The Contracting Officer's decision shall be final unless the Contractor (1) appeals in writing to a higher level in the PHA/IHA in accordance with the PHA's/IHA's policy and procedures or (2) files suit in a court of competent jurisdiction. Such appeal must be made within thirty (30) days after receipt of the Contracting Officer's decision."

1.04 APPROVED SURETY

- A. No security is required on this project.

1.05 INSURANCE

- A. The types and amounts of insurance to be provided shall be as stated in 00 85 00 CONTRACTOR'S INSURANCE.

1.06 OCCUPATIONAL SAFETY & HEALTH ACT

- A. Each Contractor and all subcontractors are hereby reminded that this project is subject to the procedures and regulations of the Williams-Stegler Occupational Safety & Health Act, current edition with pertinent amendments.

- B. Each Contractor and all subcontractors are further reminded that the implementation of the procedures and regulations pertaining to the above-mentioned act are his complete responsibility. Neither the Owner, nor the Architect, shall be responsible for enforcement violations thereof, or the legal consequences resulting from violations thereof.

1.07 CODES

- A. All work on this project shall be in accordance with all applicable federal, state and local codes and regulations having jurisdiction over this project.

1.08 CONTRACT DOCUMENTS

- A. Where a deviation from the Contract Documents is permitted by the Architect with regard to any portion of the services, materials, labor and/or equipment required for the work, such permission shall not be construed to be a precedent for the handling of any subsequent interpretation or application of the provisions of the Contract Documents.
- B. All portions of the Contract Documents are intended to cooperate and agree. If the Drawings disagree within themselves or with the Specifications, the better quality or greater quantity of work or materials shall be estimated upon and, unless amended in writing, shall be provided. Any discrepancy between portions of the Contract Documents shall be brought to the Architect's attention. The Architect will provide a written interpretation or resolution which will become part of the Contract Documents.
- C. Anything shown on the Drawings and not mentioned in the Project Manual or vice versa must be furnished by the Contractor without extra compensation. Furthermore, if any materials or work is required which is absolutely necessary to carry out the full meaning and intent of the Drawings and Specifications, the Contractor hereby agrees to consider and allow for the same as fully as if they are so noted and to perform the work without extra charge or claim for extra compensation.
- D. The Contractor is not to scale the Drawings to establish an intended dimension or to presume any dimension not given. However, if a conflict exists between the drawing scale and the noted dimension, generally the written dimension shall govern. Any discrepancy related to drawing scale and dimensions, or any missing dimensions, shall be brought to the Architect's attention for resolution.
- E. The Specifications are, in part, of the brief or "streamlined" type and include incomplete sentences. Words "as per" shall mean "in accordance with". Words "shall" or "shall be" are inferred where a colon(:) is used within a sentence or phrase. Words "provide" and "work" shall mean furnish, install and connect up complete, in operative condition and ready for use, all materials, equipment, apparatus and required appurtenances of the particular item to which it has reference. Whenever the words "approved", "satisfactory", "directed", "submitted", "inspected", or similar words or phrases are used, it shall be assumed that the word "Architect" follows the verb as the object of the clause, such as "approved by the Architect" and "submitted to the Architect".

1.09 CONTRACTOR'S RESPONSIBILITY FOR WORK

- A. Equipment, Final Connections, Etc.: Unless otherwise shown and/or selected, all special furnishings and/or equipment will be furnished and installed by the equipment contractor. Each equipment vendor shall furnish all switches, outlet boxes, trim, safety devices, tail pieces, etc., unless specifically noted otherwise. Unless otherwise noted, the Contractor will bring services to indicated locations and make final connections to all equipment, and this will include labor

and material from the rough-in location to tail pieces, outlet boxes, etc.

- B. Adjustment to Building Conditions: The locations and arrangement of the various parts of the installations are indicated on the Drawings and the parts shall be installed as approximately shown thereon. Any change necessary to pass immovable obstructions shall be made by the Contractor without additional cost. Under no circumstances shall any sizes be decreased or changes be made in any part of the installation without the written consent of the Architect.
- C. Anchor Bolts, Sleeves, Etc.: Where any equipment to be installed requires anchor bolts or frames to be cast in concrete, these shall be furnished by the respective subcontractor whose equipment requires same for other trades to install. The equipment subcontractor shall coordinate such anchor installations to insure proper positioning.

Each subcontractor to install steel pipe or sheet metal sleeves at all locations where their installation will require the penetration of a concrete or masonry wall, floor or roof structure. Where such installations penetrate a wall, floor or roof which is fire rated, subcontractor is to provide a fire-stopping assembly approved for use for items scheduled to penetrate the structural assembly. Where portions of the fire-rated assembly or any sleeves are required to be set or cast-in-place by another trade, the aforementioned subcontractor to provide all required materials and coordinate the layout and installation of these materials.

- D. Lifting Devices and Hoisting Facilities: Each subcontractor shall provide his own cranes, hoists, towers, and other lifting devices necessary for the proper and efficient movement of his materials; provide qualified operating personnel for equipment as required; provide equipment with proper guys, bracing and other safety devices as required by federal, local or state codes; and remove towers and hoisting equipment when they are no longer needed.
- E. Barricades and Warnings: Each Contractor shall construct and maintain all barricades as required to provide protection to the public and to the work. Danger signals, warning signs, red flags, lanterns and lights shall be provided and maintained as needed. All the above shall comply with all applicable codes and ordinances.
- F. Temporary Bracing: At all times during the construction and/or erection of the project and/or its component parts, prior to the completion of the structural frame of this project and/or the placement and permanent connection of the component members of the structural frame, each contractor shall provide, install and maintain properly designed and constructed temporary bracing of adequate strength to prevent dislocation, distorting, cracking, falling of, or any other damage to their work on the project and/or its component parts due to excessive wind forces.
- G. Lead Paint: No lead-based paint shall be used on this project, and no new material or product that contains lead-based paint shall be used on this project.

Per EPA regulations, in all renovation, repair, and painting jobs on pre-1978 housing and child-occupied facilities, Contractor must be certified by the EPA to conduct lead-based paint activities and renovations and utilize lead-safe work practices.

- H. Asbestos Materials: No asbestos or asbestos-containing materials or products shall be used on this project. Further, the Architect and/or the Owner shall have the right to demand from the Contractor, subcontractor, material supplier and/or manufacturer a dated, signed and notarized certification stating that the building product contains no asbestos materials. Failure or refusal on the part of the Contractor, subcontractor, material supplier or manufacturer to furnish said certification shall be just cause to withhold future payments or release of retainage to the Contractor.

- I. Cleaning Up: In addition to the requirements of the General Conditions, the General Contractor shall do the following cleaning for all trades at the completion of the work in accordance with Section 01 34 00 CUTTING AND PATCHING and Section 01 74 00 CLEANING.

Cleanup shall be accomplished in all areas of work and in areas affected by the work as described herein and in Contract Documents.

In order to protect residents during the construction process, the Contractor shall clean the site at the conclusion of each work day and render same free from debris and construction materials not incorporated in the work.

1.10 MATERIAL AND WORKMANSHIP

- A. Specified Products: Products are generally specified by ASTM or other referenced standard, and/or by manufacturer's name and model number or trade name. When specified only by reference standard, the Contractor may select any product or manufacturer as specified as being equally acceptable. The Contractor has the option of using any product and manufacturer combination listed. (When only one product and manufacturer is specified, this is the basis of the Contract, without substitution or exception). Where "or equal" or "or equal as approved by the Architect" or "Architect approved equal" is used in the Specifications, it shall mean that, prior to using the product on the project, it has been approved by the Architect in writing through the same process described for substitutions.
- B. Color Selection: Unless the precise color is specifically described in the Contract Documents, whenever a choice of color is desired, submit accurate color charts and samples to the Architect for review and selection.
- C. Availability of Specified Items: Verify, prior to bidding, that all specified items will be available in the time table required for orderly and timely installation so as not to impede the progress of the work. In the event specified item or items will not be available, so notify the Architect a minimum ten (10) working days prior to receipt of bids
- D. Sales Tax Statement: All Materials purchased by the Contractor and/or subcontractor for construction, which become affixed to the realty, WILL NOT BE SUBJECT TO STATE SALES TAX.

1.11 SUBSTITUTIONS

- A. The Contract is based on the products, materials, equipment and methods described in the Contract Documents. The Architect will consider proposals for substitutions for materials, equipment and methods only when such proposals are accompanied by full and complete technical data and all other information required by the Architect to evaluate the proposed substitutions.
- B. Do not substitute materials or methods, unless such substitution has been specifically approved for this work by the Architect in writing. Such requests for submittals and substitutions must be submitted in time for Architect to evaluate – a minimum ten (10) working days prior to bid due date. After bid award, product substitutions will be allowed as per section 01 60 00 SUBSTITUTIONS.

1.12 WARRANTIES AND GUARANTEES

- A. Each Contractor shall guarantee his work for a period of one (1) year from the date of Substantial Completion except where a longer guarantee is specified. Neither the final

certificate of payment nor any provision in the Contract Documents shall relieve the Contractor of responsibility for negligence, faulty material or workmanship within the extent and period provided by said guarantees or by law, whichever is longer.

- B. The guarantee period shall begin on the date of substantial completion of the project as identified on the "Certificate of Substantial Completion" (AIA G704, latest edition). The Contractor's guarantee for construction shall be submitted to the Architect for the Owner on the Contractor's company letterhead in the form prescribed by the Architect.
- C. Refer to individual specification sections for additional guarantee requirements which act in conjunction with the Contractor's guarantee.

1.13 PERMITS AND FEES

- A. As required by federal, state, or local codes and/or ordinances, each Contractor shall pay all costs for permits and fees required for their respective trades, and include such costs in their bids. Each bidder shall be responsible for contacting the local governing agency for such cost information. No work shall be started until all permits have been obtained and all costs and fees have been paid. The Owner will provide any state approvals required for the project unless noted otherwise in the Contract Documents.

1.14 PROJECT SUPERINTENDENT

- A. The project superintendent shall be satisfactory to the Owner; thus, the Contractor shall assign a superintendent only after the Owner has reviewed the superintendent's qualifications, is aware of who the superintendent will be and approves of such. A change in the superintendent can occur only after written authorization of the Owner.

1.15 PROGRESS SCHEDULE

- A. The General Contractor shall provide a progress schedule (such as bar chart) for Architect's review and shall update same as required throughout the course of the project. The Contractor shall generally conform to the most recent schedule.

1.16 ADJUSTMENTS TO THE CONTRACT

- A. In accordance with Clause 29; paragraph (f), item (3) of the General Conditions: The Contractor may include an equitable percentage of profit in his proposal for changes to the Contract Price, but in no case shall the profit requested exceed the following, unless the Contractor demonstrates entitlement to a higher percentage:

	Indirect Cost	_Profit	Commission
To Contractor on work performed by other than its own forces	0%	0%	10%
To first tier subcontractor on work performed by its subcontractor	0%	0%	10%
To Contractor and/or the sub-contractor for that portion of the	To Be		

work performed with their respective forces	Negotiated		
	5% Max	10%	0%

- B. Not more than four percentage points will be allowed regardless of the number of tier subcontractors. The Contractor shall not be allowed a commission on the commission received by first tier subcontractor.

1.17 INDIANA SALES TAX

- A. This Project is tax exempt. The successful bidder will be furnished with the PHA Tax Exempt Number for purchasing of materials pertaining to this project.

1.18 LIQUIDATED DAMAGES

- A. The Contractor is responsible for completing the project within the time established in the Construction Contract as stipulated in Article 3 unless time extensions are authorized by the Architect and the Owner and documented via executed Change Order. If the work is not completed by the Contract Date, the Contractor shall be liable for liquidated damages resulting from such unexcused delays.
- B. Liquidated damages shall be assessed at a rate not to exceed \$200.00/per day for each calendar day the Contract Time exceeds that set forth in Article 3 of the Agreement. These liquidated damages are payable to the Owner on demand and the Owner may, at its option, be paid from any retainage owed to Contractor on the job, whether held in escrow or not, or retain the amount of such damages from any additional payments which Contractor is otherwise entitled to receive under this Agreement.
- C. Liquidated damages shall reflect monetary losses by Owner as a result of the failure by Contractor to complete the work by the Contract Date related to the daily cost to relocate some of the residents. The Architect will review the total amount of liquidated damages being assessed and will advise both Owner and Contractor as to his opinion whether the amount of damages established by the Owner is reasonable.
- D. Contractor agrees that the maximum liquidated damages amount established herein is reasonable. Contractor further agrees that it will pay assessed liquidated damages to Owner upon request together with Owner's costs of collection, including but not limited to its attorney's fees and expenses.
- E. When a change in Contract Time is approved which was the result of a delay caused by the Contractor, or by his failure to act on a timely basis or subcontractors actions, he shall have no claim against the Owner or Architect for an increase in the Contract Sum, nor a claim against the Owner or Architect for a payment or allowance of any kind for damage, loss or expense resulting from such delay. The only remedy available to the Contractor shall be the aforementioned modification of Contract Time.

1.19 PRE-CONSTRUCTION CONFERENCE

- A. A pre-construction conference will be scheduled within fifteen(15) working days after official notification of the Contract Award.
- B. In addition to the bond requirements noted under 00 21 00 SUPPLEMENTAL INSTRUCTIONS TO BIDDERS, paragraph 5, at the time of the pre-construction conference, the Contractor shall submit one original and one copy of each of the following to the Owner:
- _____ Hold Harmless Agreement.

- _____ Equal Employment Opportunity Certification.
- _____ Certificate of Insurance for Contractor and all subcontractors and their sub-subcontractors.
- _____ Three (3) copies of Contractor's Section 3 recruitment plan and supporting information.
- _____ Notice of Nondiscrimination.
- _____ Contractor's Notification of Subcontracts Awarded.
- _____ Certificate from Contractor Appointing Officer or Employee to Supervise Payment of Employee.
- _____ Contractor's Certification Concerning Equal Employment Opportunity Requirements.
- _____ Request for Acceptance of Subcontractor (one for each subcontractor and sub-subcontractor).
- _____ Non-Collusive Affidavit for Subcontractor and their sub-subcontractors (one for each subcontractor and sub-subcontractor).
- _____ Schedule of Construction (bar graph preferred, 3 copies).
- _____ Schedule of Amounts for Contract Payments (AIA G703). The Contractor shall submit to the Architect a schedule of values allocated to the various portions of the work, prepared on AIA G703 and supported by such data to substantiate its accuracy as the Architect may require. This schedule, unless objected to by the Architect, shall be used only as a basis for the Contractor's applications for payment.

1.20 PAYMENTS AND COMPLETION

- A. On or about the fifteenth day of each month (or as agreed upon by all parties at the Pre-Construction Conference), the Owner will pay to the Contractor ninety percent (90%) of the value of all work performed and all materials suitably stored on the site, up to the first day of the previous month less the aggregate of previous payments. No payments will be made for materials stored off site. In order to be considered timely, Contractor shall submit copies of the following to Architect, unless noted otherwise, no more than four (4) working days after the first day of the month:
 - _____ Three (3) copies of invoice utilizing latest revised edition of AIA Documents G702 and G703 (sample on page 00 62 00-22 and 00 62 00-23).
 - _____ Three (3) sets of Form CC-257 Monthly Employment Utilization Report (sample on pages 00 62 00-20 and 00 62 00-21).
 - _____ Three (3) copies of Contractor's Invoice Form (at Contractor's option).
 - _____ Three (3) copies of Contractor's Certification as required by Paragraph 27(e) of General Conditions for Construction Contracts (sample on page 00 62 00-24).
 - _____ Three (3) copies each of partial waivers of lien from Contractor for the current month's pay request and all subcontractors for the previous month's payment.
 - _____ Three (3) copies of Contractor's Section 3 recruitment report and supporting information.
- B. The following forms shall be completed weekly and forwarded to the Owner:
 - 1. Two (2) sets of either Form WH-348 Statement of Compliance (sample on pages 00 62 00-13 thru 00 62 00-14) for computer payroll systems, or two (2) set of U.S. Department of Labor Form WH-347 Payroll Form (sample on pages 00 62 00-15 thru 00 62 00-17) for manual payroll systems.

- C. After final inspection and acceptance of the work by the Architect and the Owner, the Contractor shall submit for final payment. Final payment will be paid sixty (60) days after the following close-out documents are received:

- _____ Three (3) sets of Final Request for Payment, AIA Documents G702 and G703 (sample on pages 00 62 00-22 thru 00 62 00-23).
- _____ Three (3) copies each of final waivers of liens from Contractors and all subcontractors.
- _____ Three (3) copies of Contractor's Certification as required by Paragraph 27(e) of General Conditions for Construction Contracts (sample on page 00 62 00-24).
- _____ Three (3) copies of Affidavit of Completion (refer to page 00 64 00-1).
- _____ Three (3) copies of Contractor's Certificate of Guarantee (refer to page 00 64 00-2)
- _____ Three (3) copies of Contractor's Letter of Release (refer to page 00 64 00-3).
- _____ Three (3) copies of Consent of Surety Company to Final Payment (refer to page 00 64 00-4).
- _____ Three (3) copies of Form of Contractor's Certificate and Release (refer to pages 00 64 00-5 and 00 64 00-6).
- _____ Three (3) copies of all manufacturer's warranties.
- _____ Three (3) sets of all operation/maintenance manuals.
- _____ Three (3) copies of record drawings ("as-builts").
- _____ Signed receipt (by Owner) indicating all "attic stock" material has been received by Owner. See item 1.27 below.
- _____ Three (3) copies of letter from local building department stating that all permits are closed that relate to this work. (NOTE: If no permit was required, Contractor must submit a letter from the local building department stating that no permit was required.)
- _____ Three (3) copies of final Section 3 report, indicating total amount paid to each Section 3 resident.

1.21 LIENS

- A. The Contractor and subcontractors are prohibited from placing a lien on the PHA property.
- B. Partial lien waivers must be submitted with each Periodical Estimate showing proof of payment for labor and materials. A final lien waiver is required upon completion of payment to same. All lien waivers must be submitted in original form with notarized signatures.

1.22 RETAINAGE

- A. The Retainage withheld shall be 10%. When the project is 50% complete, the Contractor may request that no future retainage be withheld. If, in the opinion of the Architect/Engineer, the Contractor's work has been satisfactory to date, this request will be approved.

1.23 OFF-SITE STORAGE

- A. The Owner shall not pay for any materials which are stored off the site.

1.24 BUY AMERICAN

- A. Contractor shall, wherever possible, follow the "Buy American" regulations as set forth by HUD in Section 1605 of the Recovery Act.

1.25 SECTION 3 IMPLEMENTATION

- A. The work to be performed under this contract is on a project assisted under a program providing direct Federal financial assistance from the Department of Housing and Urban Development and 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 requires that to the greatest extent feasible, opportunities for training and employment be given to lower income residents of the area of the Section 3 covered project, and contracts for work in connection with the project be awarded to business concerns which are located in, or owned in substantial part by persons residing in the area of the Section 3 covered project.
- B. The parties to this contract will comply with the provisions of said Section 3 and the regulations issued pursuant thereto by the Secretary of Housing and Urban Development set forth in 24 CFR Part 135, and all applicable rules and orders of the Department issued thereunder prior to the execution of this contract. The parties to this contract certify and agree that they are under no contractual or other disability which would prevent them from complying with these requirements.
- C. The Contractor will send to each labor organization or representative of workers with which he has a collective bargaining agreement or other contract or understanding, if any, a notice advising the said labor organization or workers' representative of his commitment under this Section 3 clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment or training.
- D. The Contractor will include this Section 3 clause in every subcontract for work in connection with the project and will, at the direction of the applicant for or recipient of Federal financial assistance, take appropriate action pursuant to the subcontract upon a finding that the subcontractor is in violation of regulations issued by the Secretary of Housing and Urban Development, 24 CFR Part 135. The Contractor will not subcontract with any subcontractor where it has notice or knowledge that the latter has been found in violation of regulations under 24 CFR Part 135 and will not let any subcontract unless the subcontractor has first provided it with a preliminary statement of ability to comply with the requirements of these regulations.
- E. Compliance with the provisions of Section 3, the regulations set forth in 24 CFR Part 135, and all applicable rules and orders of the Department issued thereunder prior to the execution of the contract, shall be a condition of the Federal financial assistance provided to the project, binding upon the applicant or recipient, its contractors and subcontractors, its successors, and assigns to those sanctions specified by the grant or loan agreement or contract through which Federal assistance is provided, and to such sanctions as are specified by 24 CFR Part 135.
- F. The Contractor will complete the "Statement of Compliance Certification" prior to beginning the project. A copy of the statement is included in this Specification.

1.26 RECORD DRAWINGS/OPERATION & MAINTENANCE MANUAL

- A. At the completion of the project, each Contractor shall submit three (3) sets of prints which have been marked in red to indicate all changes made which deviate from the original Contract documenting construction.
- B. The Contractor shall furnish a minimum of three (3) complete sets of operation/maintenance manuals to the Architect for Owner's use. See Section 01 72 00 PROJECT RECORD DOCUMENTS for further requirements.

1.27 PROGRESS MEETING

- A. The Owner may request at will that all principals of performing contractors be gathered in a meeting for the purpose of discussion relating to work progress, coordination of operation delays, clarification, time schedules, etc. Notification will be issued by an authorized person and attendance will be mandatory ... one (1) per every other week (maximum).

1.28 ATTIC STOCK

- A. All opened cartons, paint cans and non-returnable items shall be turned over to the Owner. Also, refer to each Specification section for additional requirements.

END OF SECTION

**SECTION 00 85 00
CONTRACTOR'S INSURANCE**

PART 1 GENERAL

1.01 SCOPE

- A. Contractor shall be required to carry insurance including but not limited to:
 - Workers' Compensation
 - General Liability
 - Automobile Liability
 - Umbrella Liability
 - Aircraft Liability
 - Builder's Risk/Property Insurance
- B. Proof of Carriage of Insurance
 - 1. Certificates of Insurance:
 - a. The Contractor shall submit two (2) certificates of insurance to the Architect. To provide evidence of coverage, utilize the latest edition ACORD Certificate of Insurance Form 25 or Form 25S showing the requisite insurance limits. Insurance shall be placed with satisfactory carriers (Best Rating of A or better) licensed in the state where the work is to be performed, and countersigned by a resident in that state. Certificates are required from Contractor and all subcontractors.
 - b. The Contractor's certificate should specifically reference the project and also show evidence of coverage for explosion, collapse, and underground liability, as well as Independent Contractor's Liability.
 - c. Certificates are to include a statement that the additional insured parties are to be expressly endorsed onto the policy as cancellation notice recipients.
 - d. No work will be performed on the project until the Contractor's certificates of insurance showing the required insurance is in force and until such insurance has been approved by the Owner and Architect.
 - e. The Contractor shall take responsibility for obtaining and submitting subcontractors' certificates of insurance evidencing the same coverage and limits of liability required of the Contractor prior to the subcontractor beginning work on the project.
 - 2. Notice Upon Renewal: When renewing insurance coverage during the course of the project, it will be the Contractor's responsibility to provide the Owner with written certification 15 days prior to the policy expiration date. The Contractor shall provide the Architect with a copy of a Binder of Insurance listing coverage limits and any endorsements. Allowing the insurance to expire constitutes negligence on the part of the Contractor and shall be grounds for the Owner to immediately stop the work. Furnish copies of any endorsements that are subsequently issued amending coverage or limits.
 - 3. Term of Insurance Coverage: All insurance shall be maintained in full force and effect until the work has been fully and completely performed and shall remain in effect for a period of one (1) year from date of Substantial Completion.

1.02 CONTRACTOR'S INSURANCE

- A. All such policies and insurance will name the Owner and Architect as additional insured parties as pertains to work performed at the site, and certificates endorsing the same shall be forwarded to each party. Contractor's insurance shall be primary and contractor's policies and certificates of insurance shall include such language.

B. The types and amounts of insurance to be provided for by the Contractor shall be adequate for the project. However, the following are minimums unless agreed to in writing by both the Owner and Architect:

1. Worker's Compensation Insurance:

- a. The Contractor shall provide worker's compensation and occupational disease insurance including employer's liability. Such policy shall specifically include coverage in the state in which the work is to be performed. The employer's liability limit shall be a minimum of:

\$100,000 Each Accident

\$500,000 Policy Limit

\$100,000 Each Employee

The Worker's Compensation policy shall contain the following endorsement, unless specifically prohibited by compensation insurance authorities having jurisdiction:

"Whereas, Contractor may undertake to perform work for the Owner, and whereas, said Owner may exercise some degree of jurisdiction or control over the employees of Contractor engaged in such work, it is agreed that, subject to the conditions and limitations of this policy, said Owner is named as an additional insured employer under this policy, but only as respects employees of Contractor whose names appear on the payroll records of Contractor while performing such work for said company."

2. General Liability Insurance:

- a. The Contractor shall maintain a commercial general liability form of insurance with minimum limits (or higher limits if required by the umbrella liability carrier to satisfy underlying requirements) of:

\$2,000,000 General Aggregate (Per Project Aggregate Endorsement)

\$2,000,000 Products/Completed Operations Aggregate

\$1,000,000 Personal & Advertising Injury

\$1,000,000 Each Occurrence

- b. General Liability Insurance to include Owner and Architect as additional insured, including products/completed operations, on a primary/non-contributory basis. This additional insured coverage to be provided under ISO CG 20 10 11/85 or an equivalent endorsement.

- c. The policy shall include:

- 1) Contractor's operations coverage,
- 2) Independent contractor's protective liability on a "blanket" basis to cover the operations of any Subcontractor,
- 3) Completed operations coverage,
- 4) Blanket broad form contractual liability coverage shall be obtained specifically to include coverage for the "hold harmless" clause contained elsewhere in the Contract, and evidence of this coverage shall appear on the certificate (Contractual Liability Coverage at least as broad as coverage provided under ISO CG 00 01 12/07),
- 5) Personal injury liability including employees,
- 6) Broad form property damage liability including completed operations (to be specifically noted on the certificate), and
- 7) Explosion, collapse, and underground liability.

3. Automobile Liability Insurance:

- a. Contractor shall maintain comprehensive automobile liability insurance with minimum limits of \$1,000,000 (Combined Single Limit) BI/PD each accident. The automobile liability insurance must include coverage for all owned, non-owned, and hired automobiles.

4. Umbrella Liability Insurance:

- a. An umbrella policy shall be furnished in the minimum amount of \$5,000,000 per occurrence with a \$5,000,000 aggregate limit.
- 5. Aircraft Liability Insurance:
 - a. If any aircraft is to be used by the Contractor in connection with this Contract either as a conveyance to or from the location of the job site or for use in the course of construction, liability insurance in amounts acceptable to the Owner shall be obtained by the Contractor, and this liability coverage shall be shown on the insurance certificate.
- 6. Builder's Risk/Property Insurance:
 - a. The Contractor shall maintain "All Risk" insurance (Builder's Risk Completed Value Form Insurance) which shall include, but not be limited to, fire, lightning, extended coverage perils, vandalism and malicious mischief, collapse, water damage from bursting pipes, and theft of building materials from the job site upon the modernization which is the subject of this Contract. Coverage shall extend to materials stored off-site or in route to the site, purchased solely for the project.
 - b. Coverage shall include items of labor and materials connected therewith whether in or within 100 feet of the structure insured, materials in place or to be used as part of the permanent construction, including surplus materials, protective fences, bridges, temporary structures, miscellaneous materials and supplies incidental to the work, and such scaffolding, staging, towers, forms, and equipment which is not owned or rented by the Contractor, the cost of which is included in the cost of the work.
 - c. The Contractor shall provide insurance coverage for portions of the work stored off-site and also for that portion of the work in transit that is not covered by the Builder's Risk policy. The Owner and Contractor waive all rights against each other for damages caused by the perils covered by such insurance.
 - d. Furthermore, it is the Contractor's responsibility to insure himself against those claims for theft, vandalism and other such items which are not covered in the Builder's Risk Policy. Each Contractor shall at his own expense insure himself against claims for the theft and vandalism of materials and equipment including items owned, leased or borrowed, stored on the site in trailers, buildings, etc., which are not intended to become a permanent part of the work.
 - e. The policy shall insure the Owner and shall also include the interest of the Contractor, subcontractors, and sub-subcontractors during the course of construction until completed and accepted by the Owner.
 - f. Loss, if any, is to be adjusted both with and payable to the Owner as trustee for the insured parties as their interest may appear, except in such cases as may require payment of all or a portion of such insurance to be made to the mortgagee, as his interest may appear. The Contractor shall pay any deductibles.
 - g. Exclusions: The insurance does not cover any tools owned by mechanics or any tools, equipment, scaffolding, staging, towers, and forms owned or rented by the Contractor (the capital value of which is not included in the cost of the work) or Contractor's sheds or other structures that are erected for housing the workmen.
 - h. Subrogation Clause: It is hereby stipulated that this insurance shall not be invalidated should the insured waive in writing prior to a loss any and all such rights of recovery against any party for any loss occurring to the property described herein.

END OF SECTION

DIVISION I
General Requirements

**SECTION 01 10 00
SUMMARY OF WORK**

PAT 1 GENERAL

1.01 SCOPE

- A. The scope of work includes providing all labor, tools, equipment, materials and supervision necessary to complete the work as follows:
Replacement of the interior storefront at Offices 105 and 107 with partition walls and new doors with a buzzer system. Replacement of the exterior storefront of both Offices with EIFS walls. New exit door at Office 107.

1.02 JOB REQUIREMENTS

- A. The requirements set forth in Division 0 (Bidding and Contract Requirements) shall apply to all Contractors and/or Subcontractors.
- B. Throughout the body of the documents, the terms "General Contractor", "Contractor", "Subcontractor", etc., are used, and these terms shall indicate general and specific areas of responsibility. No "request for extra" will be entertained from any Contractor which arises out of interpretation of this language. The work will be bid and pursued under one (1) General Construction Contract.
- C. Products not specified but meeting the specifications may be incorporated in the work provided they are approved in advance by the Architect.
- D. Throughout the body of the specifications, from time to time, work required in one section and/or division of work is referred to from another section and/or division of work. All bidders are required to refer to all divisions of these specifications.
- E. The Contractor shall notify the Architect of the existence of any discrepancies found between the information contained in these plans and specifications and actual field conditions. Notification shall be in writing seven (7) business days prior to the Initiation of Work. Failure to do so indicates acceptance by the Contractor of the information listed.
- F. This Manual was prepared in accordance with U.S. Department of Housing and Urban Development (HUD) Notice PIH 88-27 (PHA), issued September 21, 1988 and HUD regulations in effect as of this date, 24 CFR Parts 35 and 965 (sub part H), and all work shall be performed to meet these regulations.

1.03 SPECIAL REQUIREMENTS

- A. All work, except as noted otherwise, may be performed from 8:00 a.m. to 5:00 p.m. Exterior work may be performed from dawn to dusk.
- B. Work will be conducted in and around occupied residential buildings. The Contractor shall make every effort to keep public areas clean, safe, free of obstructions, avoid undue noise, take all necessary precautions and be responsible for the protection of the residents and their property during the course of the project.
- C. At the end of each day, all work that can be completed shall be complete prior to leaving; remove all waste material, e.g. boxes, packing, debris, etc., and leave the area broom clean.

- D. Nails, screws, sheet metal cut-offs and other sharp material shall be cleaned up regularly during the work. No such material shall remain at the end of the day.
- E. Parking arrangements shall be arranged with the Housing Authority prior to initiation of work. If deemed necessary, construction vehicles may be required to park off site.

1.04 SEQUENCE OF CONSTRUCTION

- A. The Contractor will submit a work schedule and coordinate with the Owner, to provide notification of residents four days prior to beginning work.

END OF SECTION

**SECTION 01 22 00
ALLOWANCES**

THE FOLLOWING CASH ALLOWANCES WILL BE INCLUDED IN THE BASE BID. LABOR (UNLESS NOTED OTHERWISE) FOR HANDLING, UNLOADING, INSTALLATION, OVERHEAD, PROFIT AND OTHER EXPENSES CONTEMPLATED FOR THE STATED ALLOWANCE AMOUNT SHALL BE INCLUDED IN THE CONTRACT SUM AND NOT IN THE ALLOWANCE.

1.01 GENERAL REQUIREMENTS

An allowance amount shall be included in the base bid. This amount shall include labor and materials necessary to complete work of an undetermined scope but which is anticipated due to the requirement that new work be modified to meet existing, indeterminable conditions. Nothing in this allowance shall be construed to relieve Contractor of the responsibility to review the site of the proposed work and verify existing conditions. No approvals will be granted to utilize this allowance amount to compensate for contractor's lack of knowledge of conditions which are observable at the site. \$5,000.00

END OF SECTION

**SECTION 01 23 00
ALTERNATES**

PART 1 VOLUNTARY ALTERNATES

- 1.01 CONTRACTOR IS ENCOURAGED TO SUBMIT VOLUNTARY ALTERNATES FOR PROCEDURES, MATERIALS OR EQUIPMENT THAT PRODUCE SAVINGS FOR THE OWNER. EACH VOLUNTARY ALTERNATE IS TO BE ACCOMPANIED BY NECESSARY BROCHURES, SHOP DRAWINGS, ENGINEERING, ETC., FOR THE ARCHITECT'S AND OWNER'S USE IN EVALUATING SUCH ALTERNATES. THE OWNER MAY AWARD CONTRACTS TAKING INTO ACCOUNT ANY AND ALL VOLUNTARY ALTERNATES RECEIVED. ANY VOLUNTARY ALTERNATE SUBMITTED MAY BE USED TO THE BENEFIT OF THE OWNER EVEN THOUGH THE BIDDER SUBMITTING THE ALTERNATE MAY NOT BE AWARDED THE CONTRACT.**

END OF SECTION

SECTION 01 33 00 SUBMITTALS

PART 1 GENERAL

1.01 REQUIREMENTS

- A. Contractors and subcontractors that are required to submit information shall submit the following:
 - 1. Drawings: Minimum four (4) sets of prints. Two (2) will be returned.
- B. Product Information: Minimum four (4) complete sets of all the manufacturers' literature, data and/or catalog cuts pertaining to the item(s) to be used and the item(s) highlighted. Two (2) will be returned.
- C. In lieu of paper submittals, Contractor may elect to deliver submittals electronically, in the form of .PDF files. If this option is selected, one (1) file shall be submitted per required Specification section, Drawing, or product information literature, data and/or catalog cut sheet. Upon review, Architect or Consultant will return a reviewed file to the Contractor. Contractor shall be responsible for distribution to office, field and subcontractors. Submittals requiring physical samples shall have samples delivered under separate cover to the Architect for review.
- D. The Contractor shall prepare, review and stamp with their approval all submittals before sending them to the Architect for review. Any submittals forwarded to the Architect without such review and approval will be returned without review. Also, submittals found to be "rubber stamped" without actual review by the Contractor but with clear and obvious errors will be similarly returned without review by the Architect.
- E. Contractors and subcontractors submitting drawings and/or product information shall allow fifteen (15) working days processing time for the Architect to review and return such submittals. The Architect will not be held responsible for delays in construction resulting from the Contractor and subcontractor being required to resubmit drawings and/or product information. Contractors and subcontractors shall correct and return to Architect submittals marked either "Note Markings", "Resubmit", "Rejected", or "Not Reviewed" within fifteen (15) calendar days.
- F. Contractor shall take the following action for each respective marking:
 - 1. **NO EXCEPTIONS TAKEN** - Copies may be distributed.
 - 2. **NOTE MARKINGS/RESUBMIT** - Contractor may proceed with fabrication, taking into account the necessary corrections. Corrected shop drawings shall be resubmitted before fabrication of this work is complete to obtain a different action marking. Do not allow drawings marked "Resubmit" to be used in connection with installation of the work.
 - 3. **NOTE MARKINGS/CONFIRM** - Final but Restricted Release; Contractor may proceed with fabrication, taking into account the necessary corrections on submittal and in conformance with Contract Documents.
 - 4. **REJECTED** - Contractor will be required to resubmit shop drawings in their entirety. No fabrication or installation shall be started until shop drawings so marked have been completely revised, resubmitted, and marked by Architect.
 - 5. **NOT REVIEWED** - Products not as specified; or substitution submittal without justification; or submittal not required.
- G. Material Safety Data Sheets are not acceptable submittals. Any product submitted which does not match the Specification will be rejected unless it is accompanied by a proper Substitution Request as outlined in Section 01 60 00 SUBSTITUTIONS.

H. Submittals not requested by the Architect shall be returned without action.

END OF SECTION

**SECTION 01 34 00
CUTTING AND PATCHING**

PART 1 GENERAL

1.01 RELATED REQUIREMENTS SPECIFIED ELSEWHERE:

- A. Section 01 10 00 SUMMARY OF WORK.

1.02 EXECUTE CUTTING, INCLUDING EXCAVATING, FITTING AND/OR PATCHING OF WORK REQUIRED TO:

- A. Make several parts fit properly.
- B. Uncover work to provide for installation of ill-timed work.
- C. Remove and replace defective work.
- D. Remove and replace work not conforming to the requirements of the Contract Documents.
- E. Remove samples of installed work as specified for testing.
- F. Install specified work in existing construction.

1.03 ARCHITECT'S ACCESS:

- A. In addition to the Contract requirements, the Contractor shall, upon written instructions from the Architect, uncover work to provide for the Architect's observation of covered work, remove samples of installed materials for testing and remove work to provide for alteration of existing work.

1.04 CUTTING AND PATCHING:

- A. The Contractor shall be responsible for any cutting, fitting and patching that may be required to complete his work, except as otherwise specified.

1.05 SUBMITTALS:

- A. Prior to cutting that affects the structural safety of the project or work of another subcontractor, submit written notice to the Architect requesting consent to proceed. The notice shall include:
 - 1. Identification of the project.
 - 2. Description of the affected work.
 - 3. Necessity for cutting.
 - 4. Affect on other work and/or structural integrity.
 - 5. Description of the proposed work designating the scope of cutting and patching, the Contractor and trade to execute the work, products proposed for use, and the extent of refinishing.
 - 6. Alternatives to the proposed cutting and patching.
 - 7. Designation of party responsible for cost of cutting and patching.
- B. Prior to cutting and patching done on the instructions of the Architect or the Owner, submit cost estimate.

- C. Should conditions of work or schedule indicate a change of materials or methods, submit a written recommendation to the Architect stating the conditions necessitating the change, recommendations for alternative materials or methods, and submittals as required for substitutions.
- D. Notify the Architect in writing when covered work will be uncovered for observations.

1.06 PAYMENT OF COSTS:

- A. Costs incurred as a result of ill-timed or defective work, or work not conforming to the requirements of the Contract Documents, including the costs for additional services of the Architect, shall be the responsibility of the party responsible for the ill-timed or defective work, or the rejected, non-conforming work.
- B. The cost for work done on instructions of the Architect or Owner, other than defective or non-conforming work, will be the responsibility of the Owner.

PART 2 PRODUCTS

2.01 MATERIALS:

- A. Materials for replacement of work removed shall comply with the specifications for that type of work.

PART 3 EXECUTION

3.01 INSPECTION:

- A. Inspect existing conditions of work, including all elements subject to movement or damage during cutting and patching, and excavating and backfilling. After work is uncovered, inspect conditions affecting the installation of new products.

3.02 PREPARATION:

- A. Prior to cutting, provide shoring, bracing and support as required to maintain structural integrity, protection for other portions of the work, and protection from the elements.

3.03 PERFORMANCE:

- A. Execute fitting and adjustment of products to provide a finished installation in compliance with specified tolerances and finishes.
- B. Execute cutting and demolition by methods which will prevent damage to other work and will provide the proper surfaces to receive the new work and installation of repairs.
- C. Restore work which has been cut or removed; installed new products to provide completed work in accordance with the requirements of the Contract Documents.
- D. Refinish (paint) areas patched as necessary to provide a uniform finish.

END OF SECTION

**SECTION 01 50 00
TEMPORARY FACILITIES**

PART 1 GENERAL

1.01 SANITATION, LIGHT, POWER, HEAT AND WATER

- A. Contractor may use water, electric (but not in apartments) and public toilet facilities at each site. The Contractor shall take such means as the Architect may direct to effectually prevent the creation of a nuisance on the work or on any part of the property of the Owner.

1.02 OFFICE, STORAGE AND FACILITIES FOR ARCHITECT'S REPRESENTATIVE

- A. The Contractor shall take charge of the areas of work during construction. Additionally, the Contractor shall provide an office area, at an approved location. This area shall have copies of all correspondence, construction drawings and specifications including all changes, revisions and shop drawings.
- B. Storage sheds and trailers on site may be installed only with prior approval of the Owner. Locate as directed.

1.03 TELEPHONE SERVICE

- A. The Contractor shall provide either a portable telephone (cellular phone) or a telephone at a fixed location on the job during the operations for his own use in the work and the use of all subcontractors engaged in the work. Toll charges will be paid by the persons making the long-distance calls. The superintendent shall carry either a cordless phone or a pager so that he may be contacted any time during working hours.
- B. The Owner and the Architect shall be able to contact the project superintendent at all times during the work day by pager and/or cellular phone.

1.04 DISPOSAL FACILITIES

- A. The Contractor shall provide a dumpster at the project for the duration of the project, located as directed by Owner. Use of the Owner's dumpsters is forbidden. The Contractor may choose to remove all refuse on a daily basis in lieu of providing a dumpster.

1.05 BARRICADES AND WARNINGS

- A. The General Contractor shall construct and maintain all barricades as required to provide protection to the public and to the work. Danger signals, warning signs, red flags, lanterns and lights shall be provided and maintained as needed. All the above shall comply with all applicable codes and ordinances and shall be as approved by the Owner and the Architect.

1.06 STORAGE TRAILERS

- A. The Contractor may provide storage trailers for material storage. Trailers shall be located on site as directed by the Owner.

END OF SECTION

SECTION 01 60 00 SUBSTITUTIONS

PART 1 GENERAL

1.01 SCOPE

- A. Refer to Section 00 80 00 SUPPLEMENTARY GENERAL CONDITIONS of these specifications for additional requirements.
1. Contractor is advised that the proposal and subsequent Contract for Construction are based on the products, materials, equipment and methods described in the Contract Documents. The Architect will consider proposals for substitutions submitted more than ten (10) calendar days prior to the bid date and for a limited period of five (5) working days after the Notice to Proceed provided that such proposals are submitted in accordance with stipulations outlined herein.
 2. Proposals for substitutions will be considered only if said proposals increase the quality of the project, decrease the expenditure on the part of the Owner or are clearly superior to the products, materials, equipment, and methods specified herein. Proposals for substitutions which appear to be submitted only to decrease the expenditures on the part of the Contractor without a corresponding proposal for a reduction in the Contract amount will not be entertained. No substitutions will be accepted after the initial period for submittals of such substitutions.
 3. It is the responsibility of the Contractor to verify, prior to bidding, that specified items will be available during orderly and timely progress of the work. No request for an extension of the time of completion will be entertained by the Architect if such an extension is a result of the Contractor's lack of knowledge of the availability of the specified items. If a substitution is proposed resulting from availability problems with specified materials, proposals should also include consideration for modifications to the Contract amount on behalf of the Owner.
- B. All substitution requests shall address the following issues as a minimum for consideration:
1. Provide complete manufacturer's product information as required by Section 01 33 00 SUBMITTALS.
 2. List the specified product which is to be substituted.
 3. If the product is equal to that specified, state the proposed credit to the Owner.
 4. If the product is superior to that specified, explain in detail the advantages as well as any disadvantages.

END OF SECTION

SUBSTITUTION REQUEST FORM

To: _____

Project: _____

We hereby submit for your consideration the following product substitution:

Section	Paragraph	Specified Item
_____	_____	_____

Proposed Substitution: _____

Attach complete technical data for the proposed product, including laboratory tests if applicable.

Include complete information, including changes to drawings and/or specifications which proposed substitution requires for proper installation.

Fill in blanks below; use additional sheets if necessary:

A. Is the substitution product superior to specified?

Yes? In what way? _____

B. Is the substitution product equal to the specified product?

If yes, what is the reduction in Contract amount? \$ _____

C. Is the specified product no longer available?

If yes, explain circumstances: _____

The undersigned states that the function, appearance and quality of the proposed product are equivalent or superior to the specified item.

Submitted By:

Signature

Firm: _____

Address: _____

Telephone: _____

For Use by Design Consultant:

☐ Accepted

☐ Not Accepted

☐ Accepted as Noted

☐ Received Too Late

By: _____

Date: _____

Remarks: _____

**SECTION 01 72 00
PROJECT RECORD DOCUMENTS**

PART 1 GENERAL

1.01 SCOPE

- A. Contract Documents:
- B. One complete set of contract documents shall be maintained at the project site upon which all changes, errors and corrections shall be noted.
 - 1. All contractors shall make complete and accurate entries for their respective work. Record documents shall be maintained and submitted in accordance with the following:
 - 2. At completion of the project, these shall be brought up to date and the title sheets shall be certified by the Contractor that the information is true and correct.
 - 3. Certified documents representing the Contractor shall then be submitted to the Architect for review and disposition. These record documents must be in reproducible form - one set of full sized prints and scans of the same sheets in PDF format.
- C. Approvals: Contractor's project record documents shall be reviewed by the Architect prior to processing final Certificate for Payment.

END OF SECTION

SECTION 01 74 00 CLEANING

PART 1 GENERAL

1.01 SCOPE:

- A. Related Requirements: As specified elsewhere:
 - 1. Section 00 80 00 SUPPLEMENTARY GENERAL CONDITIONS.
 - 2. Section 01 10 00 SUMMARY OF WORK.
 - 3. Section 01 34 00 CUTTING AND PATCHING.
 - 4. Cleaning for specific products or work.
 - 5. Specification section for that work.
- B. All cleaning shall be the responsibility of the Contractor unless specifically noted otherwise.
- C. Contractor shall police and clean up on a continuing basis, during his presence in the project, in all areas in which he is performing work; maintain premises and public properties free from accumulation of waste, debris and rubbish.
- D. At the completion of the work, Contractor shall remove waste materials, rubbish, tools, equipment, machinery, and surplus materials, and clean all sight-exposed surfaces. Leave project clean and ready for final cleaning.

1.02 REQUIREMENTS OF REGULATORY AGENCIES:

- A. Maintain project in accordance with Occupational Safety and Health Act, latest edition, as it applies to cleanup.
- B. Conduct cleaning and disposal operations in compliance with local ordinances and anti-pollution laws.
 - 1. Do not burn or bury rubbish and waste materials on site.
 - 2. Do not dispose of volatile waste, such as mineral spirits, oil, or paint thinner, in storm or sanitary drains.

PART 2 PRODUCTS

2.01 MATERIALS:

- A. Use only cleaning materials recommended by manufacturer for surface to be cleaned, and use cleaning materials only on surfaces recommended by cleaning material manufacturer.

PART 3 EXECUTION

3.01 DURING CONSTRUCTION:

- A. Execute cleaning to ensure that the building, grounds, and public properties are maintained free from accumulation of waste and rubbish.
 - 1. Wet down dry materials and rubbish to lay dust and prevent blowing dust.
 - 2. At reasonable intervals during progress of work, clean site and public properties, and dispose of waste materials, debris and rubbish.

3. Provide on-site containers for collection of waste materials, debris and rubbish.
 4. Remove waste materials, debris and rubbish from site and legally dispose of at a public or private dumping area off Owner's property.
 5. Handle materials in a controlled manner with as few handlings as possible; do not drop or throw materials from heights.
 6. Schedule cleaning operations so that dust and other contaminants resulting from cleaning process will not fall on wet, newly painted surfaces.
- B. Final Cleaning: The Contractor shall be responsible for final cleaning.
1. Employ experienced workmen, or professional cleaners for final cleaning.
 2. In preparation for substantial completion or occupancy, conduct final inspection of sight-exposed exterior surfaces and of concealed spaces.
 3. Remove grease, dust, dirt, stains, labels, fingerprints, and other foreign materials from sight-exposed surfaces; polish surfaces so designated to shine finish.
 4. Repair, patch and touch up marred surfaces to specified finish to match adjacent surfaces.
 5. Remove all foreign materials from site areas.
 6. Broom clean paved surfaces; rake clean other surfaces of grounds.
 7. Remove snow and ice from access to building if applicable.
 8. Contractor shall be responsible for cleaning all equipment installed.
 9. Maintain cleaning until project or portion thereof is occupied by Owner.

END OF SECTION

DIVISION II
Existing Conditions

SECTION 02 41 00 DEMOLITION

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Selective demolition of building elements for alteration purposes.

1.02 DEFINITIONS

- A. Remove: Detach or dismantle items from existing construction and dispose of them off site, unless items are indicated to be salvaged or reinstalled.
- B. Remove and Reinstall: Detach or dismantle items from existing construction in a manner to prevent damage. Clean and prepare for reuse and reinstall where indicated.
- C. Existing to Remain: Designation for existing items that are not to be removed and that are not otherwise indicated to be salvaged or reinstalled.

PART 3 EXECUTION

2.01 GENERAL PROCEDURES AND PROJECT CONDITIONS

- A. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
 - 1. Obtain required permits.
 - 2. Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.
 - 3. Provide, erect, and maintain temporary barriers and security devices.
 - 4. Conduct operations to minimize effects on and interference with adjacent structures and occupants.
 - 5. Do not close or obstruct roadways or sidewalks without permits from authority having jurisdiction.
 - 6. Conduct operations to minimize obstruction of public and private entrances and exits. Do not obstruct required exits at any time and provide alternate routes as necessary. Protect persons using entrances and exits from removal operations.
 - 7. Obtain written permission from owners of adjacent properties when demolition equipment will traverse, infringe upon, or limit access to their property.
- B. Do not begin removal until receipt of notification to proceed from Owner.
- C. Protect existing structures and other elements to remain in place and not removed.
 - 1. Provide bracing and shoring.
 - 2. Prevent movement or settlement of adjacent structures.
 - 3. Stop work immediately if adjacent structures appear to be in danger.
- D. Minimize production of dust due to demolition operations. Do not use water if that will result in ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.

2.02 SELECTIVE DEMOLITION FOR ALTERATIONS

- A. Existing construction and utilities indicated on drawings are based on casual field observation only.
 - 1. Verify construction and utility arrangements are as indicated.
 - 2. Report discrepancies to Architect before disturbing existing installation.
 - 3. Beginning of demolition work constitutes acceptance of existing conditions that would be apparent upon examination prior to starting demolition.
- B. Separate areas in which demolition is being conducted from areas that remain occupied.
 - 1. Provide, erect, and maintain temporary dustproof partitions of construction.
- C. Maintain weatherproof exterior building enclosure, except for interruptions required for replacement or modifications; prevent water and humidity damage.
- D. Remove existing work as indicated and required to accomplish new work.
 - 1. Remove items indicated on drawings.
- E. Services including, but not limited to, HVAC, Plumbing, Fire Protection, Electrical, and Telecommunications:
 - 1. Maintain existing active systems to remain in operation, and maintain access to equipment and operational components.
- F. Protect existing work to remain.
 - 1. Prevent movement of structure. Provide shoring and bracing as required.
 - 2. Perform cutting to accomplish removal work neatly and as specified for cutting new work.
 - 3. Repair adjacent construction and finishes damaged during removal work.
 - 4. Patch to match new work.

2.03 DEBRIS AND WASTE REMOVAL

- A. Remove debris, junk, and trash from site.
- B. Leave site in clean condition, ready for subsequent work.
- C. Clean up spillage and wind-blown debris from public and private lands.

END OF SECTION

DIVISION III and DIVISION IV
Not Used

DIVISION V
Metals

SECTION 05 05 23
MISCELLANEOUS METAL

PART 1 GENERAL

1.01 SCOPE

- A. Work of this section includes all labor, materials, equipment and services necessary to complete the miscellaneous metal work as indicated on the Drawings and specified herein, including but not limited to, the following:
 - 1. Rough hardware.
 - 2. Loose steel lintels and bearing plates.
 - 3. Sleeves in concrete walls and slabs.
 - 4. Steel framing, bracing, supports, anchors, bolts, shims, fastenings, and all other supplementary parts indicated on Drawings or as required to complete each item of work of this section.
 - 5. Prime painting, touch-up painting, galvanizing and separation of dissimilar metals for work of this section.
 - 6. Cutting, fitting, drilling and tapping work of this section to accommodate work of other sections and of concrete, masonry or other materials as required for attaching and installing work of this section.
- B. Related Documents
 - 1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to this section.
- C. Related Work:
 - 1. Section 09 91 00 PAINTING.
 - 2. Section 09 21 16 GYPSUM BOARD.
- D. Quality Assurance:
 - 1. Field Measurements: Take field measurements prior to preparation of shop drawings and fabrication, where possible. Do not delay job progress; allow for trimming and fitting where taking field measurements before fabrication might delay work.
 - 2. Shop Assembly: Pre-assemble items in shop to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shopping and handling limitations. Clearly mark units for re-assembly and coordinated installation.
 - 3. Reference Standards: The work is subject to requirements of applicable portions of the following standards:
 - a. "Manual of Steel Construction", American Institute of Steel Construction.
 - b. AWS D1-1 "Structural Welding Code", American Welding Society.
 - c. SSPC-SP 3 "Surface Preparation Specification No. 3, Power Tool Cleaning", Steel Structures Painting Council.
 - d. SSPC-PA 1 "Painting Application Specification", Steel Structures Painting Council.
 - e. "Handbook on Bolt, Nut and Rivet Standards", Industrial Fasteners Institute.
- E. Submittals:
 - 1. Manufacturer's Literature: Submit manufacturer's specifications, load tables, dimension diagrams, anchor details and installation instructions for products to be used in the fabrication of miscellaneous metal work, including paint products.
 - 2. Shop Drawings: Shop drawings for the fabrication and erection of all assemblies of miscellaneous iron work, which are not completely shown by manufacturer's data sheets. Include plans and elevations at not less than 1" to 1'-0" scale, and include details of

sections and connections at not less than 3" to 1-0" scale. Show anchorage and accessory items.

3. Welding shall be indicated on shop drawings using AWS symbols and showing length, size and spacing (if not continuous). Auxiliary views shall be shown to clarify all welding. Notes such as 1/4" weld, weld and tack weld are not acceptable.

PART 2 PRODUCTS

2.01 MATERIALS

A. Metals:

1. Metal Surfaces, General: For fabrication of miscellaneous metal work, which will be exposed to view, use only materials, which are smooth and free of surface blemishes including pitting, seam marks, roller marks, rolled trade names and roughness.
2. Structural Steel Sheet: Hot rolled, ASTM A570; or cold rolled, ASTM A611, Class 1; of grade required for design loading.
3. Galvanized Structural Steel Sheet: ASTM A446, of grade required for design loading. Coating designation as indicated, or if not indicated, G90.
4. Brackets, Flanges and Anchors: Cast or formed metal of the same type material and finish as supported rails, unless otherwise indicated.
5. Concrete Inserts: Threaded or wedge type: galvanized ferrous castings, either malleable iron, ASTM A47, or cast steel, ASTM A27. Provide bolts, washers and shims as required, hot-dip galvanized, ASTM A153.
6. Stainless Steel: Conform to ASTM A554, grade MT 304, No. 4 finish.
7. Security Barrier Mesh: BM10 Barrier Mesh by Clark-Deitrich, or approved equal. Fasten to framing with manufacturer's recommended fasteners.

B. Grout: Non-shrink, non-metallic grout conforming to the requirements of Section 03 30 00 CAST-IN-PLACE CONCRETE.

C. Fasteners:

1. General: Provide zinc-coated fasteners for exterior use or where built into exterior walls. Select fasteners for the type, grade and class required.
2. Bolts and Nuts: Regular hexagon head type, ASTM A307, Grade A.
3. Lag Bolts: Square head type, FS FF-B-561.
4. Machine Screws: Cadmium plated steel, FS FF-S-92.
5. Plain Washers: Round, carbon steel, FS FF-W-92.
6. Masonry Anchorage Devices: Expansion shields, FS FF-S-325.
7. Toggle Bolts: Tumble-wing type, FS FF-B-588, type, class and style as required.
8. Lock Washers: Helical spring type carbon steel, FS FF-W-84.

D. Shop Paint: Shop prime all non-galvanized miscellaneous metal items using series 88 Azero Primer made by Tnemec or No. 230R55 "Rust Barrier" made by Con-Lux.

E. Bituminous Paint: Fed. Spec. TT-C-494.

F. Galvanize Repair Coating: For touching up galvanized surfaces after erection, provide Z.R.C. Cold Galvanizing Compound made by Z.R.C. Chemical Products Co.

2.02 PRIME PAINTING

- #### **A. Scope: All ferrous metal (except galvanized steel) shall be cleaned and shop painted with one coat of specified ferrous metal primer. No shop prime paint required on galvanized steel or**

aluminum work.

- B. Cleaning: Conform to Steel Structures Painting Council Surface Preparation Specification SP 3 (latest edition) "Power Tool Cleaning: for cleaning of ferrous metals which are to receive shop prime coat."
- C. Application:
 - 1. Apply shop prime coat immediately after cleaning metal. Apply paint in dry weather or under cover. Metal surfaces shall be free from frost or moisture when painted. Paint all metal surfaces including edges, joints, holes, corners, etc.
 - 2. Paint surfaces, which will be concealed after shop assembly prior to such assembly. Apply paint in accordance with approved paint manufacturer's printed instructions, and the use of any thinners, adulterants or admixtures shall be only as stated in said instructions.
 - 3. Paint shall uniformly and completely cover the metal surfaces, 2.0 mils minimum dry film thickness.
- D. Touch-Up: In the shop, after assembly and in the field, after installation of work of this section, touch-up damaged or abraded portions of shop prime paint with specified ferrous metal primer.
- E. Apply one shop coat to fabricated metal items, except apply two (2) coats of paint to surfaces inaccessible after assembly or erection. Change color of second coat to distinguish it from the first.

2.03 GALVANIZING

- A. Scope: All ferrous metal exposed to the weather, and all ferrous metals indicated on Drawings or in Specifications to be galvanized, shall be cleaned and then hot-dipped galvanized after fabrication.
- B. Cleaning: Thoroughly clean metal surfaces of all mill scale, rust, dirt, grease, oil, moisture and other contaminants prior to galvanizing.
- C. Application: Hot-dip galvanizing shall be applied in accordance with:
 - 1. ASTM A123: Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
 - 2. ASTM A153: Galvanized Coating on Iron and Steel Hardware - Table 1.
 - 3. ASTM A446: Galvanized Coating on Steel Sheets.
 - 4. Minimum weight of galvanized coating shall be two (2) oz. per square foot of surface.
- D. Fabricate joints, which will be exposed to weather in a manner to exclude water or provide, weep holes where water may accumulate.
- E. All galvanized materials must be inspected for compliance with these Specifications and marked with a stamp indicating the name of the galvanizer, the weight of the coating, and the appropriate ASTM number.
- F. To minimize surface imperfection (e.g.: flux inclusions), material to be galvanized shall be dipped into a solution of Zinc Ammonium Chloride (pre-flux) immediately prior to galvanizing. The type of galvanizing process utilizing a flux blanket overlaying the molten zinc will not be permitted.
- G. After galvanizing, all materials not exposed to view must be chromated by dipping material in a 0.2% chromic acid solution.

- H. Galvanized surfaces, where exposed to view, must have a smooth, level surface finish. Where this does not occur, piece shall be rejected and replaced to the acceptance of the Architect.

2.04 PROTECTIVE COATINGS

- A. Whenever dissimilar metals will be in contact, separate contact surfaces by coating each contact surface prior to assembly or installation with one coat of specified bituminous paint, which shall be in addition to the specified shop prime paint. Mask off those surfaces not required to receive protective coating.

2.05 WORKMANSHIP

- A. General:
 - 1. Miscellaneous metal work shall be fabricated by an experienced fabricator or manufacturer and installed by an experienced tradesman.
 - 2. Materials, methods of fabrication, fitting, assembly, bracing, supporting, fastening, operating devices, and erection shall be in accordance with Drawings and Specifications, approved shop drawings, and best practices of the industry, using new and clean materials as specified, having structural properties sufficient to safely sustain or withstand stresses and strains to which materials and assembled work will be subjected.
 - 3. All work shall be accurately and neatly fabricated, assembled and erected.
- B. Shop Assembly: Insofar as practicable, fitting and assembly of work shall be done in shop. Shop assembled work in largest practical sizes to minimize field work. It is the responsibility of the miscellaneous metal subcontractor to assure himself that the shop-fabricated miscellaneous metal items will properly fit the field condition. In the event that shop-fabricated miscellaneous metal items do not fit the field condition, the item shall be returned to the shop for correction.
- C. Cutting: Cut metal by sawing, shearing, or blanking. Flame cutting will be permitted only if cut edges are ground back to clean, smooth edges. Make cuts accurate, clean, sharp and free of burrs, without deforming adjacent surfaces or metals.
- D. Holes: Drill or cleanly punch holes; do not burn.
- E. Connections: Make connections with tight joints, capable of developing full strength of member, flush unless indicated otherwise, formed to exclude water where exposed to weather. Locate joints where least conspicuous. Unless indicated otherwise, weld or bolt shop connections; bolt or screw field connections. Provide expansion and contraction joints to allow for thermal movement of metal at locations and by methods approved by Architect.
 - 1. Welding:
 - a. Shall be in accordance with "Standard Code for Welding in Building Construction" of the American Welding Society, and shall be done with electrodes and/or methods recommended by the manufacturer of the metals being welded.
 - b. Welds shall be continuous, except where spot welding is specifically permitted. Welds exposed to view shall be ground flush and dressed smooth with and to match finish of adjoining surfaces; undercut metal edges where welds are required to be flush.
 - c. All welds on or behind surfaces, which will be exposed to view, shall be done so as to prevent distortion of finished surface. Remove weld spatter and welding oxides from all welded surfaces.
 - 2. Bolts and Screws: Make threaded connections tight with threads entirely concealed. Use lock nuts. Bolts and screw heads exposed to view shall be flat and countersunk. Cut off projecting ends of exposed bolts and screws flush with nuts or adjacent metal.

- F. Operating Mechanism: Operating devices (i.e. pivots, hinges, etc.) mechanism and hardware used in connection with this work shall be fabricated, assembled, installed and adjusted after installation so that they will operate smoothly, freely, noiselessly and without excessive friction.
- G. Built-In Work: Furnish anchor bolts, inserts, plates and any other anchorage devices, and all other items specified under this section of the Specifications to be built into concrete, masonry or work of other trades, with necessary templates and instructions, and in ample time to facilitate proper placing and installation.
- H. Supplementary Parts: Provide as necessary to complete each item of work, even though such supplementary parts are not shown or specified.
- I. Coordination: Accurately cut, fit, drill and tap work of this section to accommodate and fit work of other trades. Furnish or obtain, as applicable, templates and drawings to or from applicable trades for proper coordination of this work.
- J. Exposed Work:
 - 1. In addition to requirements specified herein and shown on Drawings, all surfaces exposed to view shall be clean and free from dirt, stains, grease, scratches, distortions, waves, dents, buckles, tool marks, butts, and other defects which mar appearance of finished work.
 - 2. Metal work exposed to view shall be straight and true to line or curve, smooth arrises and angles as sharp as practicable, miters formed in true alignment, profiles accurately intersecting, and with joints carefully matched to produce continuity of line and design.
 - 3. Exposed fastenings, where permitted, shall be of the same material, color and finish as the metal to which applied, unless otherwise indicated, and shall be of the smallest practicable size.

2.06 MISCELLANEOUS METALS ITEMS

- A. Rough Hardware:
 - 1. Furnish bent or otherwise custom fabricated bolts, plates, anchors, hangers, dowels and other miscellaneous steel and iron shapes as required for framing and supporting woodwork, and for anchoring or securing woodwork to concrete or other structures. Straight bolts and other stock rough hardware items are specified in Division 6 sections.
 - 2. Fabricate items to sizes, shapes and dimensions required. Furnish malleable iron washers for heads and nuts which bear on wood connections; elsewhere, furnish steel washers.
- B. Loose Steel Lintels: Unless otherwise shown or noted, provide loose structural steel lintels for openings and recesses in masonry walls and partitions as shown. Weld adjoining members together to form a single unit where indicated. Provide not less than 8" bearing at each side of openings, unless otherwise indicated.
- C. Miscellaneous Light Steel Framing:
 - 1. Light steel framing, bracing, supports, framing, clip angles, shelf angles, plates, etc., shall be of such shapes and sizes as indicated on the Drawings and details or as required to suit the condition and shall be provided with all necessary supports and reinforcing such as hangers, braces, struts, clip angles, anchors, bolts, nuts, welds, etc., as required to properly support and rigidly fasten and anchor same in place and to steel, concrete, masonry and all other connecting and adjoining work.
 - 2. All light steel framing steel shall be furnished and erected in accordance with the applicable requirements of the "Specifications for the Design, Fabrication and Erection of Structural Steel for Buildings: by the American Institute of Steel Construction and as specified herein.

- D. Steel Gratings and Frames:
 - 1. Provide hot dipped galvanized steel gratings complying with FS RR-G-661 with rectangular cross bars welded to bearing bars. See Drawings for sizes and locations.
 - 2. Manufacturer: Provide gratings manufactured by Reliance, Borden, Irving Subway Grating, or approved equal.
 - 3. Hinged Section: Provide hinged sections in area way gratings where required by the Drawings. Each hinged section up to 4' wide shall be provided with two (2) five knuckle, fast pin, regular weight, plain bearing, wrought bronze butt hinges. Each hinged section over 4' wide shall be provided with three (3) butt hinges.
 - 4. Furnish grating frames, with corners mitered, welded and ground smooth, and with welded-on straps for secure anchorage into concrete. Frames and anchors to be galvanized.
- E. Sleeves in Concrete/Masonry Walls and Concrete Slabs:
 - 1. Sleeves through concrete walls shall be of Schedule 40 steel pipe with i.d. 2" larger than o.d. of pipe or conduit (including insulation, if any) to be accommodated. Sleeves shall project 1/2" on each side of finished wall. Provide rectangular 1/4" steel plate collar at center, continuously welded to the perimeter of the sleeve, and 6" wider than the o.d.
 - 2. Slots in slabs shall be 12 gauge steel sheet, galvanized, of dimensions indicated, with strap anchors welded in place not more than 12" on centers.

PART 3 EXECUTION

3.01 INSPECTION

- A. Examine the areas and conditions where miscellaneous metal is to be installed and notify the Architect of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions are corrected to permit proper installation of the work.

3.02 ERECTION

- A. Fastening to In-Place Construction: Provide anchorage devices and fasteners where necessary for securing miscellaneous metal fabrications to in-place construction; including threaded fasteners for concrete and masonry inserts, toggle bolts, through-bolts, lag bolts, wood screws, and other connectors as required.
- B. Cutting, Fitting, and Placement: Perform cutting, drilling and fitting required for installation of miscellaneous metal fabrications. Set work accurately in location, alignment and elevation, plumb, level, true and free of rack, measured from established lines and levels. Provide temporary bracing or anchors in formwork for items, which are to be built into concrete, masonry, or similar construction.
- C. Fitting Connections: Fit exposed connections accurately together to form tight hairline joints. Weld connections, which are not to be left as exposed joints, but cannot be shop welded because of shipping size limitations. Grind exposed joints smooth and touch up shop paint coat. Do not weld, cut or abrade the surfaces of exterior units, which have been hot dip galvanized after fabrication, and are intended for bolted or screwed field connections.
- D. Field Welding: Comply with AWS Code for procedures of manual shielded metal-arc welding, appearance, and quality of welds made, and methods used in correcting welding work.

- E. Touch-Up Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with same material as used for shop painting. Apply by brush or spray to provide a minimum dry film thickness of 2.0 mils.
- F. Field Touch-Up of Galvanized Surfaces: Touch up shop-applied galvanized coatings damaged during handling and installation. Use galvanizing repair coating specified herein for galvanized surfaces.

END OF SECTION

**SECTION 05 40 00
COLD-FORMED METAL FRAMING**

PART 1 GENERAL

1.01 SCOPE

- A. This section covers metal framing systems, including channels and studs for ceilings, walls, soffits, and bulkheads as shown on the drawings and/or as specified herein. Also include all bracing required for proper stud installation.
 - 1. Related Work Specified Elsewhere: Section 09 21 16 GYPSUM BOARD for gypsum wallboard.
 - 2. Related Documents: The provisions of the Sections included under Division 1, General Requirements, are included as a part of this section as though bound herein.
 - 3. References:
 - a. Reference Standards:
 - 1) ASTM:
 - (a) ASTM A653/A653M-94 "Sheet Steel, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvanealed) by the Hot Dip Process."
 - (b) ASTM A780-93a "Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings."
 - 2) American Welding Society (AWS):
 - (a) AWS D1.1 "Structural Welding Code - Steel."
 - (b) AWS D1.3 "Structural Welding Code - Sheet Steel."
 - 4. Submittals:
 - a. Product data for each type of cold-formed metal framing, accessory, and product specified.
 - b. Shop drawings showing layout, spacings, sizes, thicknesses, and types of cold-formed metal framing, fabrication, fastening and anchorage details, including mechanical fasteners. Show reinforcing channels, opening framing, supplemental framing, strapping, bracing, bridging, splices, accessories, connection details, and attachments to other units of Work.
 - 5. Quality Assurance:
 - a. Single Source Responsibility for Steel Framing: Obtain steel framing members from a single manufacturer.
 - 6. Delivery, Storage and Handling:
 - a. Deliver materials in manufacturer's unopened containers or bundles, fully identified by name, brand, type and grade. Exercise care to avoid damage during unloading, storing and erection.
 - b. Store framing on blocking, pallets, platforms or other supports off the ground.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide cold-formed metal framing by one of the following:
 - 1. Aegis Metal Framing, Chesterfield, Missouri.
 - 2. ClarkDietrich Building Systems, West Chester, Ohio.
 - 3. Marino/Ware; Div. Of Ware Industries, Inc., South Plainfield, New Jersey.
 - 4. MRI Steel Framing, LLC, Gary, Indiana.

- B. Products of other manufacturers will be considered for acceptance provided they equal or exceed the material requirements and functional qualities of the specified product. Requests for Architect's approval must be accompanied by the "Substitution Request Form" and complete technical data for evaluation. All materials for evaluation must be received at least 5 working days prior to bid due date. Additional approved manufacturers will be issued by Addendum.
 - 1. Refer to Section 00 20 00 INSTRUCTIONS TO BIDDERS and Section 01 25 00 SUBSTITUTION REQUEST FORM for additional requirements.

2.02 MATERIALS

- A. Galvanized Steel Sheet: ASTM A 653 (ASTM A 653M), zinc coated according to ASTM A525 (ASTM A 525M), and as follows:
 - 1. Coating Designation: G 60, min.
 - 2. Grade: As required by structural performance.
- B. System Components: With each type of metal framing required, provide manufacturer's standard steel runners (tracks), blocking, lintels, clip angles, shoes, reinforcements, fasteners, and accessories as recommended by manufacturer for applications indicated, as needed to provide complete metal framing system.

2.03 STEEL FRAMING FOR WALLS, SOFFITS AND BULKHEADS

- A. Metal Studs: ASTM C645, with flange edges of studs bent back 90° and doubled over to form 3/16" wide minimum lip (return), and complying with the following requirements:
 - 1. Metal studs shall be hot dipped galvanized, ASTM A525 G40, punched "wide flange" channel sections with deep leg runner channels or base track where required. Width and spacing of studs shall be as indicated, but no less than that required to comply with ASTM C754 with maximum deflection L/120 at 5 lbf. Per square foot.
 - 2. Unless indicated otherwise, metal stud framing shall be formed from the following gauge metal:
 - a. Framing openings (heads and jambs) - 16 gauge.
 - b. Remaining metal studs - 18 gauge.
- B. Steel Structural Joist Framing: Manufacturer's standard C shaped steel, 8" width, 54 mils (16ga) thick, with 1-5/8" flange width, unless otherwise noted. Protective coating shall be G40 hot-dip galvanized coating per ASTM A525.
- C. Deflection Track: Manufacturer's top runner complying with the requirements of ASTM C645 and with 3" deep flanges.
- D. Fasteners for Metal Framing: Provide fasteners of type, material, size, corrosion resistance, holding power, and other properties required to fasten steel framing and furring members securely to substrates involved; comply with the recommendations of gypsum board manufacturers for applications indicated.
- E. Framing Accessories:
 - 1. In-Wall Strapping: Concealed 16 GA X 6" metal strapping where indicated on drawings.
- F. Fabricate steel framing accessories of the same material and finish used for framing members, with a minimum yield strength of 33,000 psi.
- G. Provide accessories of manufacturer's standard thickness and configuration, unless otherwise indicated, as follows:

1. Supplementary framing.
2. Bracing, bridging, and solid blocking.
3. Web stiffeners.
4. Gussett plates.
5. Mechanically attached vertical slide clips.
6. Stud kickers and girls.
7. Reinforcement plates.

2.04 ANCHORS, CLIPS, AND FASTENERS

- A. Steel Shapes and Clips: ASTM A 36 (ASTM A 36M), zinc coated by the hot dip process according to ASTM A 123.
- B. Expansion Anchors: Fabricated from corrosion resistant materials, with capability to sustain, without failure, a load equal to 5 times the design load, as determined by testing per ASTM E 488 conducted by a qualified independent testing agency.
- C. Mechanical Fasteners: Self drilling, self threading steel drill screws.
 1. Head Type: Low profile head beneath sheathing, manufacturer's standard elsewhere.
- D. Welding Electrodes: Comply with AWS standards.
- E. Deflection and Bridging Clips:
 1. Steel: ASTM A653/A653M, SS Grade 50 (340), Class 1, 50 ksi (340 MPA) minimum yield strength, 65 ksi (450 MPA) minimum tensile strength, G-60 (Z180) hot dipped galvanized coating.
 2. Material Thickness of VertiClip SL, SL13 and SLS Series: 0.068" minimum.
 3. Material Thickness of VertiClip SLD Series: 0.036" minimum.
 4. Material Thickness of BridgeClip: 0.036" minimum.
 5. Design clips for positive attachment to structure and stud web using step-bushing technology to provide frictionless vertical movement.
 6. Provide clips with attached bushing and screw of the series, size and configuration as required, by the structural design calculations.
- F. Resilient Sound Isolation Clips:
 1. Rubber Isolator:
 - a. Natural organic or man made rubber compounds.
 - b. Molded to isolate ferrule from clip.
 - c. Minimum of 12 micro-vibration controlling pedestals at point of contact with framing member.
 - d. Manufactured to ASTM D2000, M2 AA 510 A13, which includes:
 - 1) Hardness, ASTM D2240, Shore A: 45.
 - 2) Modulus 300 Percent, ASTM D412, Die C: 5.3 Mpa.
 - 3) Tensile Strength, ASTM D412, Die C: 11.2 Mpa.
 - 4) Elongation at Break, ASTM D573: 454 percent.
 2. Clip: Galvanized or aluminum-zinc coated steel, 18 gauge.
 3. Ferrule: Zinc-electroplated steel.
 4. Projection: 1-5/8 inches from supporting structure, when 7/8-inch drywall furring channels are used

2.05 MISCELLANEOUS MATERIALS

- A. Galvanizing Repair Paint: SSPC-Paint 20 or DOD-P-21035, with dry film containing a minimum of 94 percent zinc dust by weight.

2.06 FABRICATION

- A. Fabricate cold-formed metal framing and accessories plumb, square, true to line, and with connections securely fastened, according to manufacturer's recommendations and the requirements of this Section.
 - 1. Fabricate framing assemblies in jig templates.
 - 2. Cut framing members by sawing or shearing; do not torch cut.
 - 3. Fasten cold-formed metal framing members by welding or screw fastening, as standard with fabricator. Wire tying of framing members is not permitted.
 - a. Comply with AWS requirements and procedures for welding, appearance and quality of welds, and methods used in correcting welding work.
 - b. Locate mechanical fasteners and install according to cold-framed metal framing manufacturer's instructions with screw penetrating joined members by not less than 3 exposed screw threads.
- B. Reinforce, stiffen, and brace framing assemblies to withstand handling, delivery, and erection stresses. Lift fabricated assemblies to prevent damage or distortion.
- C. Fabrication Tolerances: Fabricate assemblies to a maximum allowable tolerance variation from plumb, level, and true to line of 1/8" in 10' and as follows:
 - 1. Spacing: Space individual framing members no more than plus or minus 1/8" from plan location. Cumulative error shall not exceed minimum fastening requirements of sheathing or other finishing materials.
 - 2. Squareness: Fabricate each cold-formed metal framing assembly to a maximum out-of-square tolerance of 1/8".

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine supporting substrates and abutting structural framing for compliance with requirements, including installation tolerances and other conditions affecting performance of cold-formed metal framing. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.02 INSTALLATION, GENERAL

- A. Cold-formed metal framing may be shop or field fabricated for installation, or it may be field assembled.
- B. Install cold-formed metal framing and accessories plumb, square, true to line, and with connections securely fastened, according to manufacturer's recommendations and the requirements of this Section.
 - 1. Cut framing members by sawing or shearing; do not torch cut.
 - 2. Fasten cold-formed metal framing members by welding or screw flashing, as standard with fabricator. Wire tying of framing members is not permitted.

- a. Comply with AWS requirements and procedures for welding, appearance and quality of welds, and methods used in correcting welding work.
 - b. Locate mechanical fasteners and install according to cold-formed metal framing manufacturer's instructions with screw penetrating joined members by not less than 3 exposed screw threads.
- 3. Steel Framing Installation Standard: Install steel framing to comply with ASTM C754 and with ASTM C840 requirements that apply to framing installation.
 - a. Do not bridge building expansion and control joints with steel framing or furring members. Independently frame both sides.
- C. Metal Stud Systems:
 - 1. Stud systems shall be set to the dimensions indicated on the Drawings.
 - a. Where studs are installed directly against exterior walls, install felt strips or foam gaskets between studs and wall.
 - b. Install steel studs and furring in sizes and at spacings indicated.
 - 1) Space studs 16" o.c., unless otherwise indicated.
 - 2. Align base and top deep leg deflection runner track accurately to the framing layout. Secure to concrete floor slabs and deflection top track to floor deck above, with 1/2" concrete stud nails or other suitable fasteners, not over 24" o.c.
 - 3. Assembly connections may be welded instead of screwed.
 - 4. Install flat strap diagonal bracing at corners and wherever recommended by stud manufacturer.
 - 5. Install reinforcement within framing system building additional studs, bracing members, plates, channels and angles to support furnishings or equipment furnished by other trades. Comply with details indicated and with recommendations of gypsum board manufacturer or, if none available, with "Gypsum Construction Handbook" published by United States Gypsum Co. These items include, but are not limited to, the following:
 - a. Recessed items: Access panels, electrical boxes, openings for ducts and pipes, miscellaneous electrical mechanical, or structural penetrations.
 - 6. Do not bridge building expansion joints and control joints with steel framing or furring members. Independently frame both sides of joints with framing or furring members as indicated.
 - a. Provide a maximum 1/2" gap at control joints and fill gap with mineral fiber safing.
- D. Install framing members in one piece lengths, unless splice connections are indicated for track or tension members.
- E. Provide temporary bracing and leave in place until framing is permanently stabilized.
- F. Erection Tolerances: Install cold-formed metal framing to a maximum allowable tolerance variation from plumb, level, and true to line of 1/8" in 10' and as follows:
 - 1. Space individual framing members no more than plus or minus 1/8" from plan location. Cumulative error shall not exceed minimum fastening requirements of sheathing or other finishing materials.

3.03 REPAIRS AND PROTECTION

- A. Galvanizing Repairs: Prepare and repair damaged galvanized coatings as fabricated and installed cold-formed metal framing with galvanizing repair paint according to ASTM A780 and the manufacturer's instructions.

- B. Provide final protection and maintain conditions in a manner acceptable to manufacturer and installer to ensure that cold-formed metal framing is without damage or deterioration at the time of Substantial Completion.

END OF SECTION

DIVISION VI
Not Used

DIVISION VII
Thermal and Moisture Protection

**SECTION 07 21 00
BUILDING INSULATION**

PART 1 GENERAL

1.01 SCOPE

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to this section.

1.02 SUMMARY

- A. Section Includes:
 - 1. Extruded polystyrene insulation.
 - 2. Foam insulation/sealant.
 - 3. Fiberglass batt insulation.
 - 4. Accessories.

1.03 SUBMITTALS

- A. Comply with Section 01 33 00 SUBMITTAL PROCEDURES.
- B. Product Data: Manufacturer's specifications and technical data for each type of insulation product specified. Data shall include the following:
 - 1. Detailed specification of construction and fabrication.
 - 2. Manufacturer's installation instructions.
 - 3. Certified test reports clearly indicating compliance with 'R' requirements at 75F.

1.04 QUALITY ASSURANCE

- A. Single-Source Responsibility: Obtain each type of building insulation from a single source with resources to provide products complying with indicated requirements without delaying the work.
- B. Manufacturer's Qualifications: Not less than 5 years experience in the actual production of specified products.
- C. Installer's Qualifications: Firm experienced in installation of systems similar in complexity to those required for this project.
- D. Regulatory Requirements:
 - 1. Foam Plastic Insulation: Flame spread rating of not more than 75 and a smoke density of not more than 450.
 - 2. Blanket Type Insulation: Flame spread rating of not more than 25 and a smoke density of not more than 450.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Packing and Shipping: Deliver products in original unopened packaging with legible manufacturer's identification.
- B. Storage and Protection: Store materials in area protected from weather, moisture, direct Sunlight, and open flame or sparks. Comply with manufacturer's recommendations and as follows:

1. Store products in a cool, dry location out of direct sunlight.
2. Protect from damage caused by the elements and from construction procedures.
3. Store at a temperature of not less than 40°F.

PART 2 PRODUCTS

2.01 RIGID INSULATION

- A. Vertical application for rigid installation at exterior building walls. Consult Drawings for locations, thickness', etc.
 1. Extruded polystyrene insulation conforming to the following:
 - a. ASTM C578, Type IV.
 - b. Thickness: As indicated.
 - c. Density: Not less than 1.6 pounds per cubic foot.
 - d. Compressive Strength: Not less than 25 psi.
 - e. Aged 'R' value at 75°F per 1" thickness.- not less than 5.0
 - 1) Acceptable manufacturers and product:
 - (a) Dow Chemical: Dow Xenergy.
 - (b) Approved equal.

2.02 EXPANDING FOAM INSULATION

- A. Polymeric Foam Insulation/Sealant: One Component polyurethane foam insulation.
 1. Acceptable Manufacturers and Products:
 - a. Crack Fill: Gap & Crack Pro by Tiger Foam or approved equal.
 - b. Windows: Window & Door Pro by Tiger Foam or approved equal.

2.03 BATT INSULATION

- A. Shall be unfaced Sonobatts where noted as "sound" and Kraft-faced fiberglass batts as manufactured by Owens Corning or Architect-approved equal.

2.04 ACCESSORIES

- A. Adhesive for Fastening Rigid Insulation: As recommended by insulation manufacturer.
- B. Joint Tape: Foil faced tape as recommended by insulation manufacturer.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verification of Conditions: Examine areas and conditions under which work is to be performed and identify conditions detrimental to proper or timely completion.
 1. Do not proceed until unsatisfactory conditions have been corrected.

3.02 INSTALLATION: COMPLY WITH MANUFACTURER'S RECOMMENDATIONS.

3.03 INSTALLATION OF RIGID INSULATION

- A. Attach insulation using manufacturer's recommended methods for the type of substrate being adhered to. See Drawings for details.

- B. Install rigid insulation at locations and of "R" values or thickness not less than those indicated.
- C. Carefully cut and fit insulation to provide a tight fitting assembly. Butt panels tight together without gaps or voids.

3.04 INSTALLATION OF BATT INSULATION

- A. Install batt insulation at locations and of thickness indicated herein.
- B. Install batt of sufficient sizes to provide friction fit. Anchor to studs, gypsum material, and other members using clips and/or other type fasteners to prevent batt from settling.
- C. Fit insulation tight within spaces and tight to and behind mechanical and electrical services within the plane of the insulation. Leave no gaps or voids.

3.05 MISCELLANEOUS INSTALLATION

- A. Fill voids and cracks around frames and blocking and other voids in exterior walls and around windows with foam insulation/sealant.
 - 1. Install full depth of void.

END OF SECTION

SECTION 07 24 00
EXTERIOR INSULATION AND FINISH SYSTEM

PART 1 GENERAL

1.01 SCOPE

- A. This section includes furnishing all labor, materials, tools and equipment required to install new Air and Moisture Barrier and EIF System as shown on the Drawings, as herein specified and as required for a complete job.
 - 1. Job Requirements:
 - a. Manufacturer Requirements:
 - 1) Member in good standing of the EIFS Industry Members Association (EIMA).
 - 2) System manufacturer for a minimum of ten (10) years.
 - b. Contractor Requirements:
 - 1) Engaged in application of EIFS for a minimum of three (3) years.
 - 2) Knowledgeable in the proper use and handling of EIFS materials.
 - 3) Employ skilled mechanics who are experienced and knowledgeable in EIFS application, and familiar with the requirements of the specified work.
 - 4) Successful completion of a minimum of three (3) projects of similar size and complexity to the specified project.
 - 5) Provide the proper equipment, manpower and supervision on the job site to install the system in compliance with manufacturer's published specifications and details and the project Plans and Specifications.
 - 2. Submittals:
 - a. Product Data: Provide data on proposed EIFS system, including product characteristics, performance criteria, limitations and durability.
 - b. Samples: Submit two 8" square (min.) size samples of each finish coat color and texture.
 - c. Certificate: System manufacturer's approval of applicator.
 - d. Sealant: Sealant manufacturer's certificate of compliance with ASTM C920, ASTM C1382.
 - e. System manufacturer's current specifications, typical details, system design guide and related product literature which indicate preparation required, storage, installation techniques, jointing requirements and finishing techniques.
 - f. Provide five-year written warranty covering materials and workmanship for the EIFS system.

PART 2 MATERIALS

2.01 MANUFACTURERS

- A. Provide EIFS system, Air/Moisture Barrier and accessories from single source manufacturer or approved supplier.
- B. EIFS System: Outsulation X System as manufactured by Dryvit.
 - 1. Products meeting or exceeding the requirements of the Drawings and Specifications manufactured by Sto Corp. or others may be submitted to the Architect for approval.

2.02 SUBSTRATE

- A. Fiberglass mat-faced gypsum sheathing. See Section 09 21 10 GYPSUM BOARD. Prepare surface for new EIFS finish as recommended by manufacturer.

2.03 AIR/MOISTURE BARRIER

- A. Dryvit Air/Water-Resistive Barrier Coating or as recommended by the manufacturer for the substrate and other project conditions.
 - 1. Provide a continuous waterproof air/moisture barrier at new EIFS system. Furnish and install proper flashing at windows, terminations, penetrations, intersections, as recommended by the manufacturer.

2.04 ADHESIVE

- A. Dryvit Genesis Adhesive. Apply in vertical notched trowel configuration to back of insulation board.

2.05 RIGID INSULATION

- A. Extruded polystyrene insulation boards, in thicknesses as noted on Drawings. See Section 07 21 00 BUILDING INSULATION for additional details. Supplementary fasteners as recommended by manufacturer.

2.06 BASE COAT

- A. First Coat: Dryvit Genesis base coat with embedded Dryvit Standard Plus reinforcing mesh.
- B. Second Coat: Dryvit Genesis base coat.
- C. Reinforcing Meshes: Symmetrical, interlaced open-weave glass fiber fabric made with alkaline-resistant coating for compatibility with EIFS materials. Dryvit Standard Plus reinforcing mesh or approved equal.

2.07 PRIMER

- A. Provide Acrylic Primer: Sto Primer or as recommended by the manufacturer for substrate and other project conditions.

2.08 FINISH COAT

- A. Acrylic-based textured wall coating, air cured, compatible with the base coat. Dryvit Finish Coat.
- B. Color Selections: Architect may select up to four (4) finish coat colors from Sherwin-Williams color selection.

2.09 JOB MIXED INGREDIENTS

- A. Water: Clean and potable.
- B. Portland Cement: ASTM C150, Type I, Type II, Type I-II.

2.10 ACCESSORIES

- A. Drainage System: Dryvit Drainage Strip adhered with Dryvit AP Adhesive.

PART 3 EXECUTION

3.01 INSTALLATION

- A. EIFS System:
 - 1. Verify that substrate installation is dry, clean, and sound prior to beginning secondary air/moisture barrier installation.
 - 2. Verify that all copings and flashings are properly installed prior to starting the work.
 - 3. Install Air/Moisture Barrier, flashings, and EIFS base and finish coats in strict compliance with manufacturer's published instructions.
 - 4. Joints:
 - a. Provide 3/4" wide expansion/control joints in the EIFS where indicated on the Drawings.
 - b. Provide 1/2" wide sealant joints at all penetrations through the EIFS (windows, doors, etc.).
 - c. Provide reveal joints where indicated on the elevation drawings.
 - d. Provide a compatible backer rod and sealant that has been evaluated in accordance with ASTM C1382, "Test Method for Determining Tensile Adhesion Properties of Sealants When Used in Exterior Insulation and Finish System (EIFS) Joints," and that meets minimum 50% elongation after conditioning. Sealant colors to match adjacent EIFS finish color.
 - e. Design joints so that Air Barrier continuity is maintained across the joint and drain.
 - 5. Trim, Projecting Architectural Features and Reveals: All trim and projecting architectural features must have a minimum 1:2 (27°) slope along their top surface. All horizontal reveals must have a minimum 1:2 (27°) slope along their bottom surface. Where trim/feature or bottom surface of reveal projects more than 2" from the face of the EIFS wall plane, protect the top surface with waterproof base coat.
 - 6. Provide protection of installed materials from water infiltration into or behind them.
 - 7. Provide protection of installed materials from dust, dirt, precipitation, freezing and continuous high humidity until they are fully dry.

END OF SECTION

**SECTION 07 62 00
FLASHING AND TRIM**

PART 1 GENERAL

1.01 SCOPE

- A. Provide labor, materials, and equipment necessary for complete installation of flashing and sheet metal work, including manufactured systems. Work under this section includes, but is not limited to:
 - 1. Flexible flashings.
 - 2. Flashing/step flashing.
 - 3. Sealants and bonding agents between components of this section and between the roof and other materials.
- B. Related Documents: The provisions of the General Conditions, Supplementary Conditions, and the sections included under Division 1, General Requirements, are included as a part of this section as though bound herein.
- C. General: Provide and install all accessories and items essential for the completeness of the sheet metal installation. Such items, unless otherwise shown on the Drawings or specified, shall be the same kind of material as the item to which applied. Nails, screws, and bolts shall be of the types suited for the purpose intended, and shall be compatible with the metal to which it will contact.
- D. Forming and assembling of sheet metal components shall be performed using methods that will not void the manufacturer's 20 year finish or 5 year spray coated warranty.
- E. Submittals:
 - 1. Product data, flashing, sheet metal, and accessories: Manufacturer's technical product data, installation instructions and general recommendations for each specified sheet material and fabricated product.
 - 2. Samples of the following flashing, sheet metal and accessory items:
 - a. 8" square samples of specified sheet materials to be exposed as finished surfaces.
 - b. 12" long samples of factory fabricated products exposed as finish work. Provide complete with specified factory finish.
 - 3. Shop drawings showing layout, profiles, methods of joining, and anchorage details, including major counterflashing, trim/fascia units, gutters, downspouts, and expansion joint systems.
- F. Quality Assurance:
 - 1. Except as otherwise indicated, the workmanship of sheet metal work, method for forming joints, anchoring, cleating and provisions for expansion shall conform to the standard details and recommendations of the Copper Development Association and the "Architectural Sheet Metal Manual" published by SMACNA; and workmanship shall be of the best quality, in accordance with best trade practice and the recommendations and specifications of the Sheet Metal and Air Conditioning Contractors National Association, Inc.
 - 2. Where pre-engineered manufactured systems are specified, other field fabricated or shop/field fabricated substitutions will not be accepted. However, where shop/field fabrications are indicated pre-engineered systems will be considered with Architect approval.

- G. Project Conditions: Coordinate work of this section with adjoining work for proper sequencing of each installation to ensure best possible weather resistance and protection of materials and finishes against damage.

PART 2 PRODUCTS

2.01 MATERIALS

- A. The type and locations of the various kinds, gauges, thickness, and finish of sheet metal to be used is specified hereinafter under the individual items. Where sheet metal is indicated on Drawings and kind or type of metal is not definitely specified, aluminum shall be provided.
- B. Aluminum Extrusions: Alloy and temper recommended by manufacturer for use intended and as required for proper application of finish indicated, but not less than the strength and durability properties specified in ASTM B221 for 6063-T5.
- C. Aluminum Sheet: Alloy and temper recommended by manufacturer for use intended and as required for proper application of finish indicated, but with not less than the strength and durability properties specified in ASTM B209 for 5005-H15.
- D. Galvanized sheet metal shall be commercial quality with 0.20% copper, ASTM A525 except ASTM A527 for lock forming; G90 hot dip galvanized, mill phosphatized where indicated for painting; 20 gauge thick except as otherwise indicated.
- E. Flexible Flashing: Shall be as manufactured by DuPont or approved equal.
 - 1. Self-Adhering – Straight Flashing:
 - a. Basis of Design: Self-adhering straight flashing membrane tape is based on DuPont StraightFlash
 - b. Description:
 - 1)]Face Material Composition: Textured polyethylene laminate barrier.
 - 2)]Face Color: White.
 - 3)]Adhesive Composition: Butyl adhesive.
 - 4)]Thickness: 30 mil.
 - 5)]Release Liner: One piece siliconized paper.
 - 2. Self-Adhering – Flexible Flashing:
 - a. Basis of Design: Self-adhering flexible flashing membrane is based on DuPont FlexWrap.
 - b. Description:
 - 1) Face Material Composition: Conformable textured polyethylene laminate barrier.
 - 2) Face Color: White.
 - 3) Adhesive Composition: Butyl adhesive
 - 4) Thickness: 70 mil
 - 5) Release Liner: 2-part siliconized paper.
 - 3. Self-Adhering – Flexible Flashing:
 - a. Basis of Design: Self-adhering flexible flashing membrane is based on DuPont FlexWrap NF.
 - b. Description:
 - 1) Face Material Composition: Conformable textured polyethylene laminate barrier.
 - 2) Face color: White.

- 3) Adhesive composition: Butyl adhesive.
- 4) Thickness: 64 mil.
- 5) Release Liner: 2-part siliconized paper.
4. Performance Characteristics:
 - a. Water Intrusion: No leakage at 75 Pa, when tested in accordance with ASTM E331.
 - b. Water Vapor Permeability: ≤ 1 perm, when tested in accordance with ASTM E96.
5. Accessories:
 - a. Seam Tape: DuPont Tyvek Tape as distributed by DuPont Building Innovations.
 - 1) Description: Pressure sensitive, polypropylene substrate with acrylic-based adhesive.
 - b. Fasteners:
 - 1) Wood Frame Construction: DuPont Tyvek Wrap Caps, as distributed by DuPont Building Innovations: #4 nails with large 1" plastic cap fasteners, or 1" plastic cap staples with leg length sufficient to achieve a minimum penetration of 5/8" into the wood stud.
 - 2) Masonry Construction: Masonry tap-con fasteners with DuPont Tyvek Wrap Caps as distributed by DuPont Building Innovations: 2" diameter plastic cap fastener.
 - c. Sealants: See Specification Section 07 92 00 JOINT SEALANTS.

2.02 MISCELLANEOUS MATERIALS AND ACCESSORIES

- A. Fasteners: Same metal as flashing/sheet metal or other non-corrosive metal as recommended by sheet manufacturer. Match finish of exposed heads with material being fastened.
- B. Bituminous Coating: SS PC-Paint 12, solvent type bituminous mastic, nominally free of sulfur, compounded for 15 mil dry film thickness per coat.
- C. Mastic Sealant: Polyisobutylene; non-hardening, non-skinning, non-drying, non-migrating sealant.
- D. Elastomeric Sealant: Generic type recommended by manufacturer of metal and fabricator of components being sealed and complying with requirements for joint sealants as specified in Section 07 92 00 JOINT SEALANTS.
- E. Epoxy Seam Sealer: 2 part non-corrosive metal seam cementing compound, recommended by metal manufacturer for exterior/interior non-moving joints including riveted joints.
- F. Metal Accessories: Provide sheet metal clips, straps, anchoring devices, and similar accessory units as required for installation of work, matching or compatible with material being installed, non-corrosive, size and gauge required for performance.
- G. Flexible Flashing Filler: Closed-cell polyethylene or other soft closed-cell material recommended by flexible flashing manufacturer as filler under flashing loops to ensure movement with minimum stress on flashing sheet.
 1. Flexible Tubing: Tube with flexible flashing shall be equal to B.F. Goodrich. The tube shall be made from closed cell synthetic rubber foam.
 2. Water barrier (vapor barrier) under cradle to expansion joint shall be equal to B.F. Goodrich's 20 mil "Lexsuo" PVC.

2.03 FINISHES

- A. General: Apply coatings either before or after forming and fabricating panels, as required by coating process and as required for maximum coating performance capability. Protect coating

either by application of strippable film or by packing plastic film or other suitable material between panels in a manner to properly protect the finish. Furnish, air drying spray finish in matching color for touch-up.

1. Provide colors or color matches as indicated by Architect.
- B. Shop Applied Finish: AAMA 2605, high-performance coating, two-coat shop applied, 70% polyvinylidene fluoride (PVDF) coating based on ELF Autochem, Inc. Kynar 500. Color(s) selected shall be selected by Architect from manufacturer's full color range.

2.04 FABRICATION

- A. General: Shop fabricate work to greatest extent possible. Comply with details shown and with applicable requirements of SMACNA "Architectural Sheet Metal Manual" and other recognized industry practices. Fabricate for waterproof and weather resistant performance, with expansion provisions for running work, sufficient to permanently prevent leakage, damage, or deterioration of the work. Form work to fit substrates. Comply with material manufacturer instructions and recommendations for forming material. Form exposed sheet metal work without excessive oil-canning, buckling, and tool marks, true to line and levels indicated, with exposed edges folded back to form hems.
- B. Seams: Fabricate non-moving seams in sheet metal with flat-lock seams. For metal other than aluminum, fin edges to be seamed, form seams and solder. Form aluminum seams with epoxy seam sealer; rivet joints for additional strength where required.
- C. Expansion Provisions: Where lapped or bayonet-type expansion provisions in work cannot be used or would not be sufficiently water/weatherproof, form expansion joints of intermeshing hooked flanges, not less than 1" deep, filled with mastic sealant (concealed within joints).
- D. Sealant Joints: Where movable, non-expansion type joints are indicated or required for proper performance of work, form metal to provide for proper installation of elastomeric sealant, in compliance with SMACNA standards.
- E. Separations: Provide for separation of metal from non-compatible metal or corrosive substrates by coating or other permanent separation as recommended by manufacturer/fabricator.
- F. Aluminum Extrusion Units: Fabricate extruded aluminum running units with formed or extruded aluminum joint covers for installation behind main members where possible. Fabricate mitered and welded corner units.
- G. Shop fabricate aluminum sheet metal, copings, soffits, aluminum edge/fascia trims, and flashings to configurations indicated on the Drawings. Products shall be as manufactured by Southern Aluminum Finishing Co., Inc. or Architect approved equal.
1. Fabricate from minimum .063" aluminum sheet metal, unless otherwise noted or required to meet SMACNA recommended minimum gauge, with factory applied finish as specified in Article B.6 - Finishes.
 2. A maximum of 2 Kynar colors will be required for metal copings.

PART 3 EXECUTION

3.01 EXAMINATION

- A. The Installer must examine substrates and conditions under which metal flashings will be installed, and notify Contractor in writing of unsatisfactory conditions. Do not proceed with installation until unsatisfactory conditions have been corrected in a manner acceptable to

Installer.

3.02 PREPARATION

- A. Separate dissimilar metals from each other by painting each metal surface in area of contact with a heavy application of bituminous coating.

3.03 INSTALLATION

- A. Except as otherwise indicated, comply with manufacturer's installation instructions and recommendations and with SMACNA "Architectural Sheet Metal Manual".
- B. Install work with provisions for thermal expansion of gutters, flashings, and other items exposed for more than 15' continuous length. Maintain a watertight installation at expansion seams. Locate expansion seams where shown, or if not shown, in conformance with applicable recommendations of "Architectural Sheet Metal Manual" by SMACNA.
- C. Sheet metal work shall be watertight and weathertight; lines, arises, and angles sharp and true; plain surfaces free from waves and buckles. Workmen shall be experienced in the trade and thoroughly capable of performing the work in accordance with these requirements.
- D. Install flexible flashing in accordance with manufacturer's recommendations. Where required, provide for movement at joints by forming loops or bellows in width of flashing. Locate cover or filler strips at joints to facilitate complete drainage of water from flashing. Seam adjacent flashing sheets with adhesive, seal and anchor edges in accordance with manufacturer's recommendations.
- E. General Flashing Non-Moving Joints: Fabricated the same as paragraph F. 1, above, except joints shall be "flat-lock" seamed rather than lap seam.
- F. Flashing at Roof Penetrations (Miscellaneous):
 - 1. Work under this section shall include the flashing of roof penetrations not otherwise specified under other sections.
 - 2. Flashing of roof penetrations not detailed shall be performed according to the recommendations and specifications of the Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA), subject to approval by the Architect.

3.04 FLEXIBLE FLASHING

- A. Verify substrate and surface conditions are in accordance with flexible flashing manufacturer recommended tolerances prior to installation.
- B. Review requirements for sequencing of installation of flexible flashing assembly with installation of windows, doors, louvers and wall penetrations to provide a weather-tight flashing assembly. "Dupont Tyvek Water-Resistive and Air Barrier Residing Installation Guidelines" for buildings less than five stories and low-rise multi-family residential buildings less than six stories.
- C. Install in accordance with the manufacturer's written instructions and as noted below:
 - 1. Opening Preparation (for use with non-flanged windows):
 - a. Flush cut weather barrier membrane at edge of sheathing around full perimeter of opening.
 - b. Cut a head flap at 45-degree angle in the weather barrier membrane at window head to expose 8" of sheathing. Temporarily secure weather barrier membrane flap away from sheathing with tape.
 - 2. Flashing (for use with non-flanged windows):

- a. Cut 7" wide DuPont FlexWrap with 2 x 4 framing and 9" wide DuPont FlexWrap with 2 x 6 framing, or DuPont FlexWrap NF a minimum of 12" longer than width of sill rough opening. Apply primer as required by manufacturer.
- b. Cover horizontal sill by aligning DuPont FlexWrap edge with inside edge of sill. Adhere to rough opening across sill and up jambs a minimum of 6". Secure flashing tightly into corners by working in along the sill before adhering up the jambs.
- c. Fan DuPont FlexWrap at bottom corners onto face of wall. Firmly press in place. Mechanically fasten fanned edges. Mechanical fastening is not required for DuPont FlexWrap NF.
- d. Apply 9" wide strips of DuPont StraightFlash at jambs. Align flashing with interior edge of jamb framing. Start StraightFlash at head of opening and lap sill flashing down to sill.
- e. Spray-apply primer to top 6" of jambs and exposed sheathing.
- f. Install DuPont FlexWrap or DuPont FlexWrap NF at opening head using same installation procedures used at sill. Overlap jamb flashing a minimum of 2".
- g. Coordinate flexible flashing with window installation.
- h. On exterior, install backer-rod in joint between window frame and flashed rough framing. Apply sealant at jambs and head, leaving sill unsealed. Apply sealants in accordance with sealant manufacturer's instructions and ASTM C1193.
- i. Position weather barrier head flap across head flashing. Adhere using 4" wide DuPont StraightFlash over the 45-degree seams.
- j. Tape top of window in accordance with manufacturer recommendations.
- k. On interior, install backer rod in joint between frame of window and flashed rough framing. Apply sealant around entire window to create air seal. Apply sealant in accordance with sealant manufacturer's instructions and ASTM C1193.
- l. Where horizontal wall flashing ends at a junction with brick veneer, install fully sealed flashing dam.

3.05 CLEANING AND PROTECTION

- A. Clean exposed metal surfaces in accordance with manufacturer's instructions. Touch-up damaged metal coatings.
- B. Protection: Provide protective measures as required to ensure that work of this section will be without damage or deterioration at time of Substantial Completion.

END OF SECTION

**SECTION 07 92 00
JOINT SEALANTS**

PART 1 GENERAL

1.01 SCOPE

- A. This section includes furnishing all labor and materials required to seal where wood, metal, masonry, and concrete meet. Do all other caulking necessary to complete the work as shown on the Drawings and/or as herein specified.
 - 1. Job Requirements: Sealant and caulking color to be selected by Architect from manufacturer's standards.
 - 2. Surface Hardness: Provide types of sealant to withstand anticipated abrasive or possible indentation as recommended by manufacturer.
 - 3. Related Documents: The provisions of the General Conditions, Supplementary Conditions, and the sections included under Division 1, General Requirements, are included as a part of this section as though bound herein.
 - 4. Submittals:
 - a. Submit product data and installation recommendations, including joint preparation instructions for each material provided.
 - b. Submit at jobsite complete color charts or sample kits for each exposed sealant and caulking material provided.
 - 1) Samples for selection purposes: Manufacturer's standard bead samples consisting of strips of actual products showing full range of colors available for each product exposed to view.
- B. Delivery, Storage and Handling:
 - 1. Deliver materials to project site in original unopened containers or bundles with labels indicating manufacturer, product name and designation, color, expiration period for use, pot life, curing time, and mixing instructions for multi-component materials.
 - 2. Store and handle materials in compliance with manufacturer's recommendations to prevent their deterioration or damage due to moisture, high or low temperatures, contaminants, or other causes.
- C. Project Conditions:
 - 1. Preparation of joint surfaces, backing, and the conditions under which the sealant and caulking is to be installed shall conform to manufacturer's recommendations.
 - a. Use of bond break tape is prohibited without the expressed permission of the Architect. Each situation will be evaluated with regard to inability to properly use backer rod to prevent adhesion.
 - 2. Environmental Conditions: Do not proceed with installation of joint sealants under the following conditions:
 - a. When ambient and substrate temperature conditions are outside the limits permitted by joint sealant manufacturer.
 - b. When joint substrates are wet.
 - 3. Joint Width Conditions: Do not proceed with installation of joint sealants where joint widths are less than allowed by joint sealant manufacturer for application indicated.
 - 4. Joint Substrate Conditions: Do not proceed with installation of joint sealants until contaminants capable of interfering with their adhesion are removed from joint substrates.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Subject to compliance with the requirements, provide products by Sika, Dow Corning Corp., or Architect-approved equal.

2.02 MATERIALS

- A. General:
 - 1. Where the term "Acceptable Standard" is used within this section, it refers to the manufacturer and product listed, which is specified as the type and quality required for this project.
 - 2. Single source responsibility for joint sealer materials: Obtain joint sealer materials from a single manufacturer for each different product required.
 - 3. Compatibility: Provide joint sealers, joint fillers, 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 final experience.
 - 4. All products to be used at the interior shall be low VOC.
- B. Caulking Compounds (Heated Interior Spaces):
 - 1. Shall be acrylic base, gun grade, non-staining, high elastic recovery, waterproof and paintable material. Shall be "Tremflex 834" by Tremco, "Rhoplex A-920" by Dow Corning, or approved equal.
- C. Sealant (Porous Exterior Surfaces Exposed to Weather): Shall be "790 Sealant" by Dow Corning, or approved equal.
- D. Sealant (Non-Porous Exterior Surfaces Exposed to Weather): Shall be "795 Sealant" by Dow Corning, or approved equal.
- E. Primers (Porous Surfaces Exposed to Weather): One component primer used to enhance the adhesion of sealants to porous surfaces such as concrete, limestone, masonry, and pre-cast. Products to be Tremco Primer #23 by Tremco, Inc. or as recommended by caulking and sealant manufacturers.
- F. Joint Backup Materials: Preformed backer rod, flexible, non-extruding, closed cell polyurethane, polyethylene, polystyrene or butyl of the non-adhering type, free from oil, tar, bitumen, solvents or other non-compatible foreign materials. Backup material shall conform to Federal Specification HH-F-341F, latest edition.
- G. Concrete Joint Sealant: Sikaflex - 2C NS/SL or approved equal.
- H. Miscellaneous Materials:
 - 1. Provide joint cleaner and joint primer sealer as recommended by the sealant or caulking compound manufacturer.
 - 2. Cleaners for Non-Porous Surfaces: Provide non-staining, chemical cleaners of type which are acceptable to manufacturers of sealants and sealant backing materials, which are not harmful to substrates and adjacent non-porous materials, and which do not leave oily residues or otherwise have a detrimental effect on sealant adhesion or in service performance.

3. Masking Tape: Provide non-staining, non-absorbent type compatible with joint sealants and to surfaces adjacent to joints.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine joints indicated to receive joint sealants, with installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint sealant performance. Do not proceed with installation of joint sealants until unsatisfactory conditions have been corrected.

3.02 PREPARATION

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealers to comply with recommendations of joint sealer manufacturers and the following requirements:
 1. Remove foreign material from joint substrates which could interfere with adhesion of joint sealer, including dust; paints, except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer; old joint sealers; oil; grease; waterproofing; water repellents; water; surface dirt; and frost.
 2. Clean concrete, masonry, unglazed surfaces of ceramic tile, and similar 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 sealers. Remove loose particles remaining from above cleaning operations by vacuuming or blowing out joints with oil free compressed air.
 3. Remove laitance and form release agents from concrete.
 4. Clean metal, glass, porcelain enamel, glazed surfaces of ceramic tile, and other non-porous surfaces by chemical cleaners or other means which are not harmful to substrates or leave residues capable of interfering with adhesion of joint sealers.
- B. Joint Priming: Prime joint substrates where indicated or where recommended by joint sealer manufacturer based on preconstruction joint sealer substrate tests or prior experience. Apply primer to comply with joint sealer manufacturer's recommendations. Confine primers to areas of joint sealer 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 which 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.

3.03 SELECTION OF MATERIAL

- A. Caulking compounds shall be used for interior non-moving joints and at locations indicated.
- B. One or two component elastomeric polyurethane sealants shall be used at exterior and interior joints where weatherproofing or waterproofing is required and at exterior and interior joints between dissimilar materials including, but not limited to, the following locations:
 1. Vertical interior expansion joints and horizontal control joints and expansion joints in the building.
 2. Perimeter of floor slabs or concrete curbs which abut vertical surfaces.
 3. Interior joints between dissimilar materials where the joining of the two surfaces leave a gap between the meeting materials and components.
 4. Exterior joints, such as window or door perimeters.

3.04 INSTALLATION

- A. General: Comply with joint sealer manufacturer's printed installation instructions applicable to products and applications indicated, except where more stringent requirements apply.
 - 1. Interior joints which require caulking are to be caulked with the specified caulking compound, unless noted otherwise.
 - 2. Joints to be filled shall be thoroughly dry and free from dust, dirt, oil, and grease at the time of application of caulks or sealants.
 - 3. Masking: Metal shall be masked with masking tape, as well as other surfaces where its required to prevent the sealant smearing the adjacent surface. Upon completion of the caulking, remove the tape.
- B. Prime or seal the joint surfaces.
- C. Install sealant backer rod of the proper size for the joint to be sealed at locations receiving sealants and as recommended by sealant manufacturer.
 - 1. Do not split (longitudinally cut) backer rod; cut to length only.
 - 2. Install expanding foam secondary sealant at 2" expansion joints in masonry as recommended by sealant manufacturer.
- D. Employ only proven installation techniques.
- E. Install sealants to depths shown or as recommended by manufacturer.
- F. Do not allow sealants to spill or stain adjoining surfaces.
- G. Remove spillage promptly without damage to the adjoining surfaces.
- H. Tooling of Non-Sag Sealants: Immediately after sealant application and prior to time skinning or curing begins, tool sealants to form smooth, uniform beads of configuration indicated, to eliminate air pockets, and to ensure contact and adhesion of sealant with sides of joint. Remove excess sealants from surfaces adjacent to joint. Do not use tooling agents which discolor sealants or adjacent surfaces or are not approved by sealant manufacturer.
 - 1. Provide concave joint configuration per figure 5A in ASTM C1193, unless otherwise indicated.
- I. Protect joint sealers during and after curing period from contact with contaminating substances or from damage resulting from construction operations or other causes so that they are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealers immediately, and the repaired areas shall be made indistinguishable from original work.

END OF SECTION

DIVISION VIII
Doors and Windows

**SECTION 08 11 13
HOLLOW METAL DOORS AND FRAMES**

PART 1 GENERAL

1.01 SCOPE

- A. General Provisions: Attention is directed to the Contract and General Conditions and all sections within Division 1 GENERAL REQUIREMENTS which are hereby made a part of this section of the Specifications.
- B. Description of Work:
 - 1. Work Included: Provide labor, materials and equipment necessary to complete the work of this section, including but not limited to the following:
 - a. Standard hollow-metal steel doors.
 - b. Standard hollow-metal steel frames.
 - 2. Related Work: The following items are not included in this section and are specified under the designated sections:
 - a. Section 08 71 00 DOOR HARDWARE for door hardware for steel doors
 - b. Section 08 80 00 GLAZING for glazed lites.
 - c. Section 09 91 00 PAINTING for field painting steel doors and frames.
- C. Submittals:
 - 1. Product Data: Include construction details, material descriptions, core descriptions, label compliance, fire-resistance rating, temperature-rise ratings, and finishes for each type of steel door and frame specified.
 - 2. Shop Drawings:
 - a. Elevations of each door design.
 - b. Details of doors, including vertical and horizontal edge details and metal thicknesses.
 - c. Frame details for each frame type, including dimensioned profiles and metal thicknesses.
 - d. Locations of reinforcement and preparations for hardware.
 - e. Details of each different wall opening condition.
 - f. Details of anchorages, joints, field splices, and connections.
 - g. Details of accessories.
 - h. Details of moldings, removable stops, and glazing.
 - i. Details of conduit and preparations for power, signal, and control systems.
 - 3. Schedule: Provide a schedule of hollow metal work prepared by or under the supervision of supplier, using same reference numbers for details and openings as those on Drawings. Coordinate with door hardware schedule.
 - 4. Qualification Data: For installer.
 - 5. Product Test Reports: Based on evaluation of comprehensive fire tests performed by a qualified testing agency, for each type of standard steel door and frame.
- D. Quality Assurance:
 - 1. Installer Qualifications: An employer of workers trained and approved by manufacturer.
 - 2. Source Limitations: Obtain standard steel doors and frames through one source from a single manufacturer.
 - 3. Fire-Rated Door, Assemblies: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire protection ratings and temperature-rise limits indicated, based on testing at positive pressure according to NFPA 252 or UL 10C.

- a. Smoke- and Draft-Control Assemblies: Provide an assembly with gaskets listed and labeled for smoke and draft control by a qualified testing agency acceptable to authorities having jurisdiction, based on testing according to UL 1784 and installed in compliance with NFPA 105.
 - 4. Fire-Rated, Borrowed-Light Assemblies (Including Sidelights and Transoms): Complying with NFPA 80 and listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction for fire-protection ratings indicated, based on testing according to NFPA 257 or UL 9.
 - 5. Pre-Installation Conference: Conduct conference at project site to comply with requirements in Division 01.
- E. Delivery, Storage and Handling:
- 1. Deliver doors and frames palletized, wrapped, or crated to provide protection during transit and project-site storage. Do not use non-vented plastic.
 - 2. Deliver welded frames with two removable spreader bars across bottom of frames, tack welded to jambs and mullions.
 - 3. Store hollow metal work under cover at project site. Place in stacks of five units maximum in a vertical position with heads up, spaced by blocking, on minimum 4" high wood blocking. Do not store in a manner that traps excess humidity.
 - a. Provide minimum 1/4" space between each stacked door to permit air circulation.
- F. Project Conditions:
- 1. Field Measurements: Verify actual dimensions of openings by field measurements before fabrication.
- G. Coordination: Coordinate installation of anchorages for hollow metal frames. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors. Deliver such items to project site in time for installation.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Available Manufacturers: Steelcraft; an Ingersoll-Rand company.

2.02 MATERIALS

- A. Cold-Rolled Steel Sheet: ASTM A1008/A1008M, Commercial Steel (CS), Type B; suitable for exposed applications.
- B. Hot-Rolled Steel Sheet: ASTM A1011/A1011M, Commercial Steel (CS), Type B; free of scale, pitting, or surface defects; pickled and oiled.
- C. Metallic-Coated Steel Sheet: ASTM A653/A653M, Commercial Steel (CS), Type B; with minimum G60 metallic coating.
- D. Frame Anchors: ASTM A591/A591M, Commercial Steel (CS), 40Z coating designation; mill phosphatized.
 - 1. For anchors built into exterior walls, steel sheet complying with ASTM A1008/A1008M or ASTM A1011/A1011M, hot-dip galvanized according to ASTM A153/A153M, Class B.
- E. Inserts, Bolts, and Fasteners: Hot-dip galvanized according to ASTM A153/A153M.

- F. Powder-Actuated Fasteners in Concrete: Fastener system of type suitable for application indicated, fabricated from corrosion-resistant materials, with clips or other accessory devices for attaching hollow metal frames of type indicated.
- G. Grout: ASTM C476, except with a maximum slump of 4", as measured according to ASTM C143/C143M.
- H. Mineral-Fiber Insulation: ASTM C665, Type I (blankets without membrane facing); consisting of fibers manufactured from slag or rock wool with 6- to 12-lb./cu. ft. density; with maximum flame-spread and smoke-development indexes of 25 and 50, respectively; passing ASTM E136 for combustion characteristics.
- I. Glazing: Comply with requirements in Section 08 80 00 GLAZING.
- J. Isolation Coating: ASTM D1187, cold-applied asphalt emulsion, VOC compliant, compounded for 15-mil dry film thickness per coat. Provide inert-type non-corrosive compound free of asbestos fibers, sulfur components, and other deleterious impurities.

2.03 STANDARD STEEL DOORS

- A. General: Provide doors of design indicated, not less than thickness indicated; fabricated with smooth surfaces, without visible joints or seams on exposed faces, unless otherwise indicated. Comply with ANSI A250.8.
 - 1. Design: Flush panel.
 - 2. Core Construction: Manufacturer's standard kraft-paper honeycomb, polystyrene, polyurethane, mineral-board, or vertical steel-stiffener core that produces doors complying with ANSI A250.8.
 - a. Fire Door Core: As required to provide fire-protection and temperature-rise ratings indicated.
 - 3. Top and Bottom Edges: Closed with flush or inverted 18 gauge end closures or channels of same material as face sheets.
 - 4. Tolerances: Comply with SDI 117, "Manufacturing Tolerances for Standard Steel Doors and Frames."
- B. Interior Doors: Face sheets fabricated from cold-rolled steel sheet. Provide doors complying with requirements indicated below by referencing ANSI A250.8 for level and model and ANSI A250.4 for physical-endurance level:
 - 1. Level 2 and Physical Performance Level B (Heavy Duty), Model 2 (Seamless), 1-3/4" thick, 18 gauge.
- C. Hardware Reinforcement: Fabricate according to ANSI/SDI A250.6 with reinforcing plates from same material as door face sheets.
- D. Fabricate concealed stiffeners and hardware reinforcement from either cold- or hot-rolled steel sheet.

2.04 STANDARD STEEL FRAMES

- A. General: Comply with ANSI A250.8 and with details indicated for type and profile.
- B. Interior Frames: Fabricated from cold-rolled steel sheet.
 - 1. Fabricate frames with full profile welded joints.
 - 2. Frames for Level 2 Steel Doors: 16 gauge steel sheet.

3. Stops and Beads: Furnish 20 gauge metal glazing beads with the hollow metal frames at locations where beads are indicated in pressed steel frames. Glazing beads for interior frames shall be on the room side.
- C. Hardware Reinforcement: Fabricate according to ANSI/SDI A250.6 with reinforcement plates from same material as frames.

2.05 FRAME ANCHORS

- A. Jamb Anchors:
1. Masonry Type: Adjustable strap-and-stirrup or T-shaped anchors to suit frame size, not less than 18 gauge, with corrugated or perforated straps not less than 2" wide by 10" long; or wire anchors not less than 0.177" thick.
 2. Stud-Wall Type: Designed to engage stud, welded to back of frames; not less than 18 gauge.
 3. Compression Type for Drywall Slip-on Frames: Adjustable compression anchors.
 4. Post-Installed Expansion Type for In-Place Concrete or Masonry: Minimum 3/8" diameter bolts with expansion shields or inserts. Provide pipe spacer from frame to wall, with throat reinforcement plate, welded to frame at each anchor location.
- B. Floor Anchors: Formed from same material as frames, not less than 18 gauge, and as follows:
1. Monolithic Concrete Slabs: Clip-type anchors, with two holes to receive fasteners.
 2. Separate Topping Concrete Slabs: Adjustable-type anchors with extension clips, allowing not less than 2" height adjustment. Terminate bottom of frames at finish floor surface.

2.06 HOLLOW METAL PANELS

- A. Provide hollow metal panels of same materials, construction, and finish as specified for adjoining hollow metal work.

2.07 STOPS AND MOLDINGS

- A. Moldings for Glazed Lites in Doors: Minimum 20 gauge, fabricated from same material as door face sheet in which they are installed.
- B. Fixed Frame Moldings: Formed integral with hollow metal frames, a minimum of 5/8" high unless otherwise indicated.
- C. Loose Stops for Glazed Lites in Frames: Minimum 20 gauge, fabricated from same material as frames in which they are installed.

2.08 LOUVERS

- A. Provide louvers for interior doors, where indicated, that comply with SDI 111C, with blades or baffles formed of 24 gauge, cold-rolled steel sheet set into 20 gauge steel frame.
1. Sightproof Louver: Stationary louvers constructed with inverted V-shaped or Y-shaped blades.
 2. Fire-Rated Automatic Louvers: Louvers constructed with movable blades closed by actuating fusible link, and listed and labeled for use in fire-rated door assemblies of type and fire-resistance rating indicated by same testing and inspecting agency that established fire-resistance rating of door assembly.

2.09 ACCESSORIES

- A. Mullions and Transom Bars: Join to adjacent members by welding or rigid mechanical anchors.
- B. Ceiling Struts: Minimum 1/4" thick by 1" wide steel.
- C. Grout Guards: Formed from same material as frames, not less than 26 gauge.

2.10 FABRICATION

- A. Fabricate hollow metal work to be rigid and free of defects, warp, or buckle. Accurately form metal to required sizes and profiles, with minimum radius for thickness of metal. Where practical, fit and assemble units in manufacturer's plant. To ensure proper assembly at project site, clearly identify work that cannot be permanently factory assembled before shipment.
- B. Tolerances: Fabricate hollow metal work to tolerances indicated in SDI 117.
- C. Hollow Metal Doors:
 - 1. Glazed Lites: Factory cut openings in doors.
 - 2. Astragals: Provide overlapping astragal on one leaf of pairs of doors where required by NFPA 80 for fire-performance rating or where indicated. Extend minimum 3/4" beyond edge of door on which astragal is mounted.
- D. Hollow Metal Frames: Where frames are fabricated in sections due to shipping or handling limitations, provide alignment plates or angles at each joint, fabricated of same thickness metal as frames.
 - 1. Full Profile Welded Frames: Weld joints continuously; grind, fill, dress, and make smooth, flush, and not visible.
 - 2. Sidelight and Transom Bar Frames: Provide closed tubular members with no visible face seams or joints, fabricated from same material as doorframe. Fasten members at crossings and to jambs by butt welding.
 - 3. Provide countersunk, flat- or oval-head exposed screws and bolts for exposed fasteners unless otherwise indicated.
 - 4. Grout Guards: Weld guards to frame at back of hardware mortises in frames to be grouted.
 - 5. Floor Anchors: Weld anchors to bottom of jambs and mullions with at least four spot welds per anchor.
 - 6. Jamb Anchors: Provide number and spacing of anchors as follows:
 - a. Masonry Type: Locate anchors not more than 18" from top and bottom of frame. Space anchors not more than 32" o.c. and as follows:
 - 1) Two anchors per jamb up to 60" high.
 - 2) Three anchors per jamb from 60" to 90" high.
 - 3) Four anchors per jamb from 90" to 120" high.
 - 4) Four anchors per jamb plus one additional anchor per jamb for each 24" or fraction thereof above 120" high.
 - b. Stud-Wall Type: Locate anchors not more than 18" from top and bottom of frame. Space anchors not more than 32" o.c. and as follows:
 - 1) Three anchors per jamb up to 60" high.
 - 2) Four anchors per jamb from 60" to 90" high.
 - 3) Five anchors per jamb from 90" to 96" high.
 - 4) Five anchors per jamb plus one additional anchor per jamb for each 24" or fraction thereof above 96" high.

- 5) Two anchors per head for frames above 42" wide and mounted in metal-stud partitions.
 - c. Compression Type: Not less than two anchors in each jamb.
 - d. Post-Installed Expansion Type: Locate anchors not more than 6" from top and bottom of frame. Space anchors not more than 26" o.c.
 - 7. Door Silencers: Except on weather-stripped doors, drill stops to receive door silencers as follows. Keep holes clear during construction.
 - a. Single-Door Frames: Drill stop in strike jamb to receive three door silencers.
 - b. Double-Door Frames: Drill stop in head jamb to receive two door silencers.
- E. Fabricate concealed stiffeners, edge channels, and hardware reinforcement from either cold- or hot-rolled steel sheet.
- F. Hardware Preparation: Factory prepare hollow metal work to receive templated mortised hardware; include cutouts, reinforcement, mortising, drilling, and tapping according to the Door Hardware Schedule and templates furnished as specified in Section 08 71 00 DOOR HARDWARE.
 - 1. Locate hardware as indicated, or if not indicated, according to ANSI/SDI A250.8.
 - 2. Reinforce doors and frames to receive non-templated, mortised and surface-mounted door hardware.
 - 3. Comply with applicable requirements in ANSI/SDI A250.6 and ANSI/DHI A115 Series specifications for preparation of hollow metal work for hardware.
 - 4. Coordinate locations of conduit and wiring boxes for electrical connections with Division 26 ELECTRICAL.
- G. Stops and Moldings: Provide stops and moldings around glazed lites where indicated. Form corners of stops and moldings with butted or mitered hairline joints.
 - 1. Single Glazed Lites: Provide fixed stops and moldings welded on secure side of hollow metal work.
 - 2. Multiple Glazed Lites: Provide fixed and removable stops and moldings, so that each glazed lite is capable of being removed independently.
 - 3. Provide fixed frame moldings on outside of exterior and on secure side of interior doors and frames.
 - 4. Provide loose stops and moldings on inside of hollow metal work.
 - 5. Coordinate rabbet width between fixed and removable stops with type of glazing and type of installation indicated.

2.11 STEEL FINISHES

- A. Prime Finish: Apply manufacturer's standard epoxy primer immediately after cleaning and pretreating.
 - 1. Shop Primer: Manufacturer's standard, fast-curing, lead- and chromate-free primer complying with ANSI/SDI A250.10 acceptance criteria; recommended by primer manufacturer for substrate; compatible with substrate and field-applied coatings despite prolonged exposure.
 - 2. Refer to Section 09 91 00 PAINTING for field-applied coating.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the work.

- B. Examine roughing-in for embedded and built-in anchors to verify actual locations before frame installation.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

- A. Remove welded-in shipping spreaders installed at factory. Restore exposed finish by grinding, filling, and dressing, as required to make repaired area smooth, flush, and invisible on exposed faces.
- B. Prior to installation, adjust and securely brace welded hollow metal frames for squareness, alignment, twist, and plumbness to the following tolerances:
 - 1. Squareness: Plus or minus 1/16", measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.
 - 2. Alignment: Plus or minus 1/16", measured at jambs on a horizontal line parallel to plane of wall.
 - 3. Twist: Plus or minus 1/16", measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of wall.
 - 4. Plumbness: Plus or minus 1/16", measured at jambs on a perpendicular line from head to floor.
- C. Drill and tap doors and frames to receive non-templated, mortised, and surface-mounted door hardware.

3.03 INSTALLATION

- A. General: Install hollow metal work plumb, rigid, properly aligned, and securely fastened in place; comply with Drawings and manufacturer's written instructions.
- B. Hollow Metal Frames: Install hollow metal frames of size and profile indicated. Comply with ANSI/SDI A250.11.
 - 1. Set frames accurately in position, plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is complete, remove temporary braces, leaving surfaces smooth and undamaged.
 - a. At fire-protection-rated openings, install frames according to NFPA 80.
 - b. Where frames are fabricated in sections because of shipping or handling limitations, field splice at approved locations by welding face joint continuously; grind, fill, dress, and make splice smooth, flush, and invisible on exposed faces.
 - c. Install frames with removable glazing stops located on secure side of opening.
 - d. Install door silencers in frames before grouting.
 - e. Remove temporary braces necessary for installation only after frames have been properly set and secured.
 - f. Check plumbness, squareness, and twist of frames as walls are constructed. Shim as necessary to comply with installation tolerances.
 - g. Field apply isolation coating to backs of frames that are filled with grout.
 - 2. Floor Anchors: Provide floor anchors for each jamb and mullion that extends to floor, and secure with post-installed expansion anchors.
 - a. Floor anchors may be set with powder-actuated fasteners instead of post-installed expansion anchors if so indicated and approved on Shop Drawings.
 - 3. Metal-Stud Partitions: Solidly pack mineral-fiber insulation behind frames.
 - 4. Masonry Walls: Coordinate installation of frames to allow for solidly filling space between frames and masonry with grout.

5. Concrete Walls: Solidly fill space between frames and concrete with grout. Take precautions, including bracing frames, to ensure that frames are not deformed or damaged by grout forces.
 6. In-Place Concrete or Masonry Construction: Secure frames in place with post-installed expansion anchors. Countersink anchors, and fill and make smooth, flush, and invisible on exposed faces.
 7. In-Place Gypsum Board Partitions: Secure frames in place with post-installed expansion anchors through floor anchors at each jamb. Countersink anchors, and fill and make smooth, flush, and invisible on exposed faces.
 8. Ceiling Struts: Extend struts vertically from top of frame at each jamb to overhead structural supports or substrates above frame unless frame is anchored to masonry or to other structural support at each jamb. Bend top of struts to provide flush contact for securing to supporting construction. Provide adjustable wedged or bolted anchorage to frame jamb members.
 9. Installation Tolerances: Adjust hollow metal door frames for squareness, alignment, twist, and plumb to the following tolerances:
 - a. Squareness: Plus or minus 1/16", measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.
 - b. Alignment: Plus or minus 1/16", measured at jambs on a horizontal line parallel to plane of wall.
 - c. Twist: Plus or minus 1/16", measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of wall.
 - d. Plumbness: Plus or minus 1/16", measured at jambs at floor.
- C. Hollow Metal Doors: Fit hollow metal doors accurately in frames, within clearances specified below. Shim as necessary.
1. Non-Fire-Rated Standard Steel Doors:
 - a. Jambs and Head: 1/8" plus or minus 1/16".
 - b. Between Edges of Pairs of Doors: 1/8" plus or minus 1/16" .
 - c. Between Bottom of Door and Top of Threshold: Maximum 3/8".
 - d. Between Bottom of Door and Top of Finish Floor (No Threshold): Maximum 3/4".
 2. Fire-Rated Doors: Install doors with clearances according to NFPA 80.
 3. Smoke-Control Doors: Install doors according to NFPA 105.
- D. Glazing: Comply with hollow metal manufacturer's written instructions.
1. Secure stops with countersunk flat- or oval-head machine screws spaced uniformly not more than 9" o.c. and not more than 2" o.c. from each corner.

3.04 ADJUSTING AND CLEANING

- A. Final Adjustments: Check and readjust operating hardware items immediately before final inspection. Leave work in complete and proper operating condition. Remove and replace defective work, including hollow metal work that is warped, bowed, or otherwise unacceptable.
- B. Remove grout and other bonding material from hollow metal work immediately after installation.
- C. Prime-Coat Touch-Up: Immediately after erection, sand smooth rusted or damaged areas of prime coat and apply touch-up of compatible air-drying, rust-inhibitive primer.
- D. Metallic-Coated Surfaces: Clean abraded areas and repair with galvanizing repair paint according to manufacturer's written instructions.

END OF SECTION

**SECTION 08 51 13
ALUMINUM WINDOWS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Extruded aluminum windows with operating sash.
- B. Factory glazing.
- C. Operating hardware.
- D. Insect screens.

1.02 RELATED REQUIREMENTS

- A. Section 07 92 00 JOINT SEALANTS: Sealing joints between window frames and adjacent construction.
- B. Section 08 81 00 GLAZING

1.03 REFERENCE STANDARDS

- A. AAMA/WDMA/CSA 101/I.S.2/A440 - North American Fenestration Standard/Specification for Windows, Doors, and Skylights; 2022, with Errata (2023).
- B. ANSI Z97.1 - American National Standard for Safety Glazing Materials Used in Buildings - Safety Performance Specifications and Methods of Test; 2015 (Reaffirmed 2020).
- C. AAMA 1503 - Voluntary Test Method for Thermal Transmittance and Condensation Resistance of Windows, Doors and Glazed Wall Sections; 2009.
- D. ASTM E283/E283M - Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Skylights, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen; 2019.
- E. ASTM E331 - Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference; 2000 (Reapproved 2023).
- F. ASTM E2190 - Standard Specification for Insulating Glass Unit Performance and Evaluation; 2019.
- G. ASTM F588 - Standard Test Methods for Measuring the Forced Entry Resistance of Window Assemblies, Excluding Glazing Impact; 2017 (Reapproved 2023).
- H. NFRC 100 - Procedure for Determining Fenestration Product U-factors; 2023.

1.04 SUBMITTALS

- A. Product Data: Include manufacturer's specifications, test reports from an AAMA-accredited laboratory, standard details verifying conformance with specifications, component dimensions, information on glass and glazing, internal drainage details, and descriptions of hardware and accessories.

- B. Shop Drawings: Provide to Owner and Architect shop drawings including all opening dimensions, elevations of different types, framed opening tolerances, anchorage locations, hardware, fastening systems, and installation requirements.
 - 1. Shop drawings to show details of fabrication and installation, including plans, elevations, sections, details of components, provisions for expansion and contraction, and attachments to other work.
 - 2. Include measurements taken in field for each rough opening.
- C. Samples:
 - 1. Finish: Two samples of specified finish for each window type used.
 - 2. Other samples as requested.
- D. Test Reports: Prior to submitting shop drawings or starting fabrication, submit test report(s) by independent testing agency showing compliance with performance requirements in excess of those prescribed by specified grade.
- E. Manufacturer's Installation Instructions: Include complete preparation, installation, and cleaning requirements.

1.05 QUALITY ASSURANCE

- A. Verify the rough opening dimensions of each opening before ordering windows.
- B. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum three years of documented experience.
- C. Installer Qualifications: Company specializing in performing work of type specified and with at least five years of documented experience.
- D. Finishes shall meet the requirements of AAMA 2605.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Handle and protect windows and accessories in accordance with AAMA CW-10 until project completion.
- B. Store products in manufacturer's unopened packaging until ready for installation.
- C. Protect finished surfaces with wrapping paper or strippable coating during installation. Do not use adhesive papers or sprayed coatings that bond to substrate when exposed to sunlight or weather.
- D. Protect the windows from the elements, construction activities, and other hazards until project completion.

1.07 WARRANTY

- A. Window: Warrant for ten (10) years against defects in material and workmanship under normal use.
- B. Finish: Warrant for twenty (20) years against chipping, peeling, cracking, blistering, fading, and chalking.

- C. Insulating Glass Units: Warrant seal for ten (10) years against visual obstruction resulting from film formation or moisture collection between the internal glass surfaces, excluding that caused by glass breakage or abuse.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Basis of Design: Peerless Products, Inc.; Fixed Window 541.
- B. Kawneer AA6400 Fixed Windows.
- C. Architect-approved equal.

2.02 ALUMINUM WINDOWS

- A. Aluminum Windows: Extruded aluminum frame and sash, factory fabricated, factory finished, with operating hardware, related flashings, and anchorage and attachment devices.
 - 1. Operable Units: Double weatherstripped.
 - 2. Provide factory-glazed units.
 - 3. Fabrication: Joints and corners flush, hairline, and weatherproof, accurately fitted and secured; prepared to receive anchors; fasteners and attachments concealed from view; reinforced as required for operating hardware and imposed loads.
 - 4. Perimeter Clearance: Minimize space between framing members and adjacent construction while allowing expected movement.
 - 5. Movement: Accommodate movement between window and perimeter framing and deflection of lintel, without damage to components or deterioration of seals.
 - 6. System Internal Drainage: Drain to the exterior by means of a weep drainage network any water entering joints, condensation occurring in glazing channel, and migrating moisture occurring within system.
- B. Fixed Type:
 - 1. Construction: Thermally broken.
 - 2. Glazing: Double; clear; transparent.
 - 3. Co-extruded nailing fin.

2.03 PERFORMANCE REQUIREMENTS

- A. U-Value: Maximum 0.38
- B. Water Penetration: No uncontrolled water leakage when tested per ASTM E331-09 and ASTM E547-09 at a static air pressure difference of 15 psf.
- C. Air Leakage: 0.1 cfm/sq ft (0.5 L/sec sq m) maximum leakage per unit area of outside window frame dimension when tested at 1.57 psf (75 Pa) pressure difference in accordance with ASTM E283/E283M.

2.04 COMPONENTS

- A. Frame: Double tubular head, sill, and jambs miter cut and fastened with two Zamac corner gussets per corner; double tubular integral mullion, if required, fastened with two Zamac gussets per frame member without penetrating the frame member with fasteners; corners

sealed by the window manufacturer with sealant conforming to AAMA 800-10.

- B. Window Frame: Extruded aluminum with integral structural thermal break installed by the window manufacturer in the frame and vent members; exterior and interior finishes applied by the window manufacturer; frames and vents assembled by the window manufacturer
- C. Vents: Double tubular horizontal and vertical vent rails and stiles miter cut and fastened with two zamac corner gussets per corner; corners sealed by window manufacturer with sealant conforming to AAMA 800-10.
- D. Water Control: Continuous compression gasket on the vent interior to utilize pressure equalization and to allow water to drain by gravity.
- E. Weatherstrip: Secured in extruded ports; double rows on sash perimeters; rigid PVC weatherseal in one side of the horizontal sash rails, and pile conforming to AAMA 701 with polypropylene center fin in remaining locations.
- F. Sealant for Setting Sills and Sill Flashing: Non-curing butyl type.
 - 1. See Section 07 92 00 for additional requirements.

2.05 MATERIALS

- A. Extruded Aluminum: ASTM B221 (ASTM B221M), 6063 alloy, T6 temper.
 - 1. Free from defects impairing strength and durability.

2.06 HARDWARE

- A. Hardware: Hardware having component parts which are exposed shall be of aluminum, stainless steel, or other non-corrosive materials. Cadmium or zinc-plated steel, where used, must be in accordance with ASTM Specification A165 or A164.
- B. Thermal Break: The thermal barrier shall provide a continuous uninterrupted thermal break around the entire perimeter of the frame and all panels and shall not be bridged by any metal conductors. The thermal break shall not be compromised by hardware or metal fasteners.

2.07 FINISHES

- A. Class I Color Anodized Finish: AAMA 611 AA-M12C22A42, integrally colored anodic coating not less than 0.7 mil (0.018 mm) thick.
- B. Finish Color: To be selected by the Architect.

2.08 GLASS AND GLAZING

- A. Construction of double insulating glass units shall have dual perimeter sealants, polyisobutylene and silicone and air space created by one continuous worm edge spacer, without corner keys, and desiccant.
- B. Glass shall be as manufactured by Libby-Owens Ford, PPG Industries, Virginia Glass Products, or Architect approved equal.
- C. Insulated Glass (Argon-Filled, Low-E): Shall be 1" minimum thick in sizes indicated on the Drawings and composed on an inner pane of 0.125" thick, tempered glazing quality, and an outer pane of 0.125" thick glazing quality, hermetically sealed and separated by an argon-filled dehydrated air space. Glass shall be clear with soft coat Low-E on #2 surfaces.

1. Center-of-Glass Winter U-Value: Maximum 0.38
2. Organic Coating: Solarban 60 soft coat Low-E on #2 surface.
3. Seal Durability: Conformance to ASTM E774-88; visible, permanent IGCC certification label for CBA rating level.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Site Examination: Verify that openings are within tolerance, plumb, level, clean, provide a solid anchoring surface, and are in accordance with approved shop drawings.
 1. Correct defective openings per Architect's instructions prior to new window installation installation.

3.02 PRIME WINDOW INSTALLATION

- A. All windows to be installed by skilled craftspeople who have demonstrated a successful history of installing windows for at least five years.
- B. Provide required support and securely fasten trim and frames, and set windows plumb, square, and level without twist or bow.
- C. Install windows in accordance with manufacturer's instructions.
- D. Install windows in accordance with approved shop drawings.
- E. 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.
- F. Attach window frame and shims to perimeter opening to accommodate construction tolerances and other irregularities.
- G. Align window plumb and level, free of warp or twist. Maintain dimensional tolerances and alignment with adjacent work.
- H. Install sill and sill end angles.
- I. Provide thermal isolation where components penetrate or disrupt building insulation. Pack fibrous insulation in shim spaces at perimeter of assembly to maintain continuity of thermal barrier.
- J. Install operating hardware not pre-installed by manufacturer.
- K. Fasteners shall be of a type which is compatible with material being applied and shall be concealed where possible. Utilize non-expanding anchors into masonry walls. Any fasteners which cannot be concealed shall be colored to match material.
- L. Apply sealant per sealant manufacturer's recommendations at joints and intersections. Wipe off excess, and leave sealant surfaces clean and smooth. See Section 07 92 00 JOINT SEALANTS. Provide maximum 3/8" wide sealant joint at window material.

3.03 ADJUSTING

- A. Adjust frames and hardware after installation, as necessary, to ensure secure weathertight closure.

3.04 CLEANING

- A. Remove protective material from factory finished aluminum surfaces after all work is complete.
- B. Wash surfaces by method recommended and acceptable to window manufacturer; rinse and wipe surfaces clean.
- C. Leave windows clean and free of labels, construction debris, and dirt.
- D. Touch-up, repair, or replace damaged products before Substantial Completion.

END OF SECTION

SECTION 08 71 00 DOOR HARDWARE

PART 1 GENERAL

1.01 SUMMARY

- A. Section includes:
 - 1. Mechanical and electrified door hardware
 - 2. Electronic access control system components
- B. Related Sections:
 - 1. Division 01 "General Requirements" sections for Allowances, Alternates, Owner Furnished Contractor Installed, Project Management and Coordination.
 - 2. Division 07 Section "Joint Sealants" for sealant requirements applicable to threshold installation specified in this section.
 - 3. Division 08 Sections:
 - a. "Aluminum-Framed Entrances and Storefronts"
 - 4. Division 26 "Electrical" sections for connections to electrical power system and for low-voltage wiring.

1.02 REFERENCES

- A. DHI - Door and Hardware Institute:
 - 1. Sequence and Format for the Hardware Schedule
 - 2. Recommended Locations for Builders Hardware
 - 3. Keying Systems and Nomenclature
 - 4. Installation Guide for Doors and Hardware
- B. NFPA – National Fire Protection Association:
 - 1. NFPA 70 – National Electric Code
 - 2. NFPA 101 – Life Safety Code
- C. ANSI - American National Standards Institute:
 - 1. ANSI A117.1 – 2017 Edition – Accessible and Usable Buildings and Facilities
 - 2. ANSI/BHMA A156.1 - A156.29, and ANSI/BHMA A156.31 - Standards for Hardware and Specialties
 - 3. ANSI/BHMA A156.28 - Recommended Practices for Keying Systems

1.03 SUBMITTALS

- A. General:
 - 1. Submit in accordance with Conditions of Contract and Division 01 Submittal Procedures.
 - 2. Prior to forwarding submittal:
 - a. Review drawings and Sections from related trades to verify compatibility with specified hardware.
 - b. Highlight, encircle, or otherwise specifically identify on submittals: deviations from Contract Documents, issues of incompatibility or other issues which may detrimentally affect the Work.
- B. Action Submittals:

1. Product Data: Submit technical product data for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.
2. Riser and Wiring Diagrams: After final approval of hardware schedule, submit details of electrified door hardware, indicating:
 - a. Wiring Diagrams: For power, signal, and control wiring and including:
 - 1) Details of interface of electrified door hardware and building safety and security systems.
 - 2) Schematic diagram of systems that interface with electrified door hardware.
 - 3) Point-to-point wiring.
 - 4) Risers.
3. Door Hardware Schedule:
 - a. Submit concurrent with submissions of Product Data, Samples, and Shop Drawings. Coordinate submission of door hardware schedule with scheduling requirements of other work to facilitate fabrication of other work critical in Project construction schedule.
 - b. Submit under direct supervision of a Door Hardware Institute (DHI) certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) with hardware sets in vertical format as illustrated by Sequence of Format for the Hardware Schedule published by DHI.
 - c. Indicate complete designations of each item required for each opening, include:
 - 1) Door Index: door number, heading number, and Architect's hardware set number.
 - 2) Quantity, type, style, function, size, and finish of each hardware item.
 - 3) Name and manufacturer of each item.
 - 4) Fastenings and other pertinent information.
 - 5) Location of each hardware set cross-referenced to indications on Drawings.
 - 6) Explanation of all abbreviations, symbols, and codes contained in schedule.
 - 7) Mounting locations for hardware.
 - 8) Door and frame sizes and materials.
 - 9) Degree of door swing and handing.
 - 10) Operational Description of openings with electrified hardware covering egress, ingress (access), and fire/smoke alarm connections.
4. Key Schedule:
 - a. After Keying Conference, provide keying schedule that includes levels of keying, explanations of key system's function, key symbols used, and door numbers controlled.
 - b. Use ANSI/BHMA A156.28 "Recommended Practices for Keying Systems" as guideline for nomenclature, definitions, and approach for selecting optimal keying system.
 - c. Provide 3 copies of keying schedule for review prepared and detailed in accordance with referenced DHI publication. Include schematic keying diagram and index each key to unique door designations.
 - d. Index keying schedule by door number, keyset, hardware heading number, cross keying instructions, and special key stamping instructions.
 - e. Provide one complete bitting list of key cuts and one key system schematic illustrating system usage and expansion. Forward bitting list, key cuts and key system schematic directly to Owner, by means as directed by Owner.
 - f. Prepare key schedule by or under supervision of supplier, detailing Owner's final keying instructions for locks.

C. Informational Submittals:

1. Provide Qualification Data for Supplier, Installer and Architectural Hardware Consultant.

2. Provide Product Data:
 - a. Certify that door hardware approved for use on types and sizes of labeled fire-rated doors complies with listed fire-rated door assemblies.
 - b. Include warranties for specified door hardware.
- D. Closeout Submittals:
 1. Operations and Maintenance Data: Provide in accordance with Division 01 and include:
 - a. Complete information on care, maintenance, and adjustment; data on repair and replacement parts, and information on preservation of finishes.
 - b. Catalog pages for each product.
 - c. Final approved hardware schedule edited to reflect conditions as installed.
 - d. Final keying schedule
 - e. Copy of warranties including appropriate reference numbers for manufacturers to identify project.
 - f. As-installed wiring diagrams for each opening connected to power, both low voltage and 110 volts.
- E. Inspection and Testing:
 1. Submit written reports to the Owner and Authority Having Jurisdiction (AHJ) of the results of functional testing and inspection for:
 - a. Required egress door assemblies, in compliance with NFPA 101.

1.04 QUALITY ASSURANCE

- A. Qualifications and Responsibilities:
 1. Supplier: Recognized architectural hardware supplier with a minimum of 5 years documented experience supplying both mechanical and electromechanical door hardware similar in quantity, type, and quality to that indicated for this Project. Supplier to be recognized as a factory direct distributor by the manufacturer of the primary materials with a warehousing facility in the Project's vicinity. Supplier to have on staff, a certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) available to Owner, Architect, and Contractor, at reasonable times during the Work for consultation.
 2. Installer: Qualified tradesperson skilled in the application of commercial grade hardware with experience installing door hardware similar in quantity, type, and quality as indicated for this Project.
 3. Architectural Hardware Consultant: Person who is experienced in providing consulting services for door hardware installations that are comparable in material, design, and extent to that indicated for this Project and meets these requirements:
 - a. For door hardware: DHI certified AHC or DHC.
 - b. Can provide installation and technical data to Architect and other related subcontractors.
 - c. Can inspect and verify components are in working order upon completion of installation.
 - d. Capable of producing wiring diagram and coordinating installation of electrified hardware with Architect and electrical engineers.
 4. Single Source Responsibility: Obtain each type of door hardware from single manufacturer.
- B. Certifications:
 1. Electrified Door Hardware:
 - a. Listed and labeled as defined in NFPA 70, Article 100, by testing agency acceptable to authorities having jurisdiction.
 2. Accessibility Requirements:

- a. Comply with governing accessibility regulations cited in "REFERENCES" article 087100, 1.02.D3 herein for door hardware on doors in an accessible route. This project must comply with all Federal Americans with Disability Act regulations and all Local Accessibility Regulations.
- C. Pre-Installation Meetings:
- 1. Keying Conference:
 - a. Incorporate keying conference decisions into final keying schedule after reviewing door hardware keying system including:
 - 1) Function of building, flow of traffic, purpose of each area, degree of security required, and plans for future expansion.
 - 2) Preliminary key system schematic diagram.
 - 3) Requirements for access control.
 - 4) Address for delivery of keys.
 - 2. Pre-Installation Conference:
 - a. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - b. Inspect and discuss preparatory work performed by other trades.
 - c. Inspect and discuss electrical roughing-in for electrified door hardware.
 - d. Review sequence of operation for each type of electrified door hardware.
 - e. Review required testing, inspecting, and certifying procedures.
 - f. Review questions or concerns related to proper installation and adjustment of door hardware.
 - 3. Electrified Hardware Coordination Conference:
 - a. Prior to ordering electrified hardware, schedule and hold meeting to coordinate door hardware with security, electrical, doors and frames, and other related suppliers.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up for hardware delivered to Project site. Promptly replace products damaged during shipping.
- B. Tag each item or package separately with identification coordinated with final door hardware schedule, and include installation instructions, templates, and necessary fasteners with each item or package. Deliver each article of hardware in manufacturer's original packaging.
- C. Maintain manufacturer-recommended environmental conditions throughout storage and installation periods.
- D. Provide secure lock-up for door hardware delivered to Project. Control handling and installation of hardware items so that completion of Work will not be delayed by hardware losses both before and after installation.
- E. Handle hardware in manner to avoid damage, marring, or scratching. Correct, replace or repair products damaged during Work. Protect products against malfunction due to paint, solvent, cleanser, or any chemical agent.

1.06 COORDINATION

- A. Coordinate layout and installation of floor-recessed door hardware with floor construction. Cast anchoring inserts into concrete.

- B. Installation Templates: Distribute for doors, frames, and other work specified to be factory or shop prepared. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.
- C. Security: Coordinate installation of door hardware, keying, and access control with Owner's security consultant.
- D. Electrical System Roughing-In: Coordinate layout and installation of electrified door hardware with connections to power supplies and building safety and security systems.

1.07 WARRANTY

- A. Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within published warranty period.
 - 1. Warranty does not cover damage or faulty operation due to improper installation, improper use or abuse.
 - 2. Warranty Period: Beginning from date of Substantial Completion, for durations indicated in manufacturer's published listings.
 - a. Mechanical Warranty:
 - 1) Exit Devices: 10 years
 - 2) Closers: 10 years
 - 3) Automatic Operators: 2 years
 - b. Electrical Warranty:
 - 1) Exit Devices: 3 years

1.08 MAINTENANCE

- A. Furnish complete set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.
- B. Turn over unused materials to Owner for maintenance purposes.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Approval of alternate manufacturers and/or products other than those listed as "Scheduled Manufacturer" or "Acceptable Manufacturers" in the individual article for the product category are only to be considered by official substitution request in accordance with section 01 25 00.
- B. Approval of products from manufacturers indicated in "Acceptable Manufacturers" is contingent upon those products providing all functions and features and meeting all requirements of scheduled manufacturer's product.
- C. Where specified hardware is not adaptable to finished shape or size of members requiring hardware, furnish suitable types having same operation and quality as type specified, subject to Architect's approval.

2.02 MATERIALS

- A. Fabrication

1. Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. provide screws according to manufacturer's recognized installation standards for application intended.
 2. Finish exposed screws to match hardware finish, or, if exposed in surfaces of other work, to match finish of this other work including prepared for paint surfaces to receive painted finish.
 3. Provide concealed fasteners wherever possible for hardware units exposed when door is closed. Coordinate with "Metal Doors and Frames", "Flush Wood Doors", "Stile and Rail Wood Doors" to ensure proper reinforcements. Advise the Architect where visible fasteners, such as thru bolts, are required.
- B. Provide screws, bolts, expansion shields, drop plates and other devices necessary for hardware installation.
1. Where fasteners are exposed to view: Finish to match adjacent door hardware material.

2.03 CONTINUOUS HINGES

- A. Manufacturers:
1. Scheduled Manufacturer:
 - a. Ives
 2. Acceptable Manufacturers:
 - a. Select
 - b. Hager
- B. Requirements:
1. Provide aluminum geared continuous hinges conforming to ANSI/BHMA A156.26, Grade 1.
 2. Provide aluminum geared continuous hinges, where specified in the hardware sets, fabricated from 6063-T6 aluminum.
 3. Provide split nylon bearings at each hinge knuckle for quiet, smooth, self-lubricating operation.
 4. Provide hinges capable of supporting door weights up to 450 pounds, and successfully tested for 1,500,000 cycles.
 5. On fire-rated doors, provide aluminum geared continuous hinges classified for use on rated doors by testing agency acceptable to authority having jurisdiction.
 6. Provide aluminum geared continuous hinges with electrified option scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware.
 7. Provide hinges 1 inch (25.4 mm) shorter in length than nominal height of door, unless otherwise noted or door details require shorter length and with symmetrical hole pattern.

2.04 ELECTRIC POWER TRANSFER

- A. Manufacturers:
1. Scheduled Manufacturer and Product:
 - a. Von Duprin EPT-10
 2. Acceptable Manufacturers and Products:
 - a. ABH PT1000
 - b. Securitron CEPT-10
- B. Requirements:
1. Provide power transfer with electrified options as scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified

- hardware.
- 2. Locate electric power transfer per manufacturer's template and UL requirements, unless interference with operation of door or other hardware items.

2.05 EXIT DEVICES

A. Manufacturers and Products:

- 1. Scheduled Manufacturer and Product:
 - a. Falcon 24/25 series
- 2. Acceptable Manufacturers and Products:
 - a. Sargent 19-43-GL-80 series
 - b. Precision Apex series

B. Requirements:

- 1. Provide exit devices tested to ANSI/BHMA A156.3 Grade 1 and UL listed for Panic Exit or Fire Exit Hardware.
- 2. Cylinders: Refer to "KEYING" article, herein.
- 3. Provide touchpad type exit devices, fabricated of brass, bronze, stainless steel, or aluminum, plated to standard architectural finishes to match balance of door hardware.
- 4. Touchpad must extend a minimum of one half of door width. No plastic inserts are allowed in touchpads.
- 5. Provide exit devices with deadlatching feature for security and for future addition of alarm kits and/or other electrified requirements.
- 6. Provide flush end caps for exit devices.
- 7. Provide exit devices with manufacturer's approved strikes.
- 8. Provide exit devices cut to door width and height. Install exit devices at height recommended by exit device manufacturer, allowable by governing building codes, and approved by Architect.
- 9. Mount mechanism case flush on face of doors or provide spacers to fill gaps behind devices. Where glass trim or molding projects off face of door, provide glass bead kits.
- 10. Provide cylinder or hex-key dogging as specified at non fire-rated openings.
- 11. Removable Mullions: 2 inches (50.8 mm) x 3 inches (76.2 mm) steel tube. Where scheduled as keyed removable mullion, provide type that can be removed by use of a keyed cylinder, which is self-locking when re-installed.
- 12. Provide factory drilled weep holes for exit devices used in full exterior application, highly corrosive areas, and where noted in hardware sets.
- 13. Provide electrified options as scheduled.
- 14. Provide exit devices with optional trim designs to match other lever and pull designs used on the project.

2.06 POWER SUPPLIES

A. Manufacturers and Products:

- 1. Scheduled Manufacturer and Product:
 - a. Schlage/Von Duprin PS900 Series
- 2. Acceptable Manufacturers and Products:
 - a. Precision ELR series
 - b. Sargent 3500 series
 - c. Securitron BPS series

B. Requirements:

- 1. Provide power supplies approved by manufacturer of supplied electrified hardware.

2. Provide appropriate quantity of power supplies necessary for proper operation of electrified locking components as recommended by manufacturer of electrified locking components with consideration for each electrified component using power supply, location of power supply, and approved wiring diagrams. Locate power supplies as directed by Architect.
3. Provide regulated and filtered 24 VDC power supply, and UL class 2 listed.
4. Provide power supplies with the following features:
 - a. 12/24 VDC Output, field selectable.
 - b. Class 2 Rated power limited output.
 - c. Universal 120-240 VAC input.
 - d. Low voltage DC, regulated and filtered.
 - e. Polarized connector for distribution boards.
 - f. Fused primary input.
 - g. AC input and DC output monitoring circuit w/LED indicators.
 - h. Cover mounted AC Input indication.
 - i. Tested and certified to meet UL294.
 - j. NEMA 1 enclosure.
 - k. Hinged cover w/lock down screws.
 - l. High voltage protective cover.

2.07 CYLINDERS

- A. Manufacturers:
 1. Scheduled Manufacturer and Product:
 - a. Existing system
 2. Acceptable Manufacturers and Products:
- B. Requirements:
 1. Provide cylinders/cores to match Owner's existing key system, compliant with ANSI/BHMA A156.5; latest revision; cylinder face finished to match lockset, manufacturer's series as indicated. Refer to "KEYING" article, herein.

2.08 KEYING

- A. Scheduled System:
 1. Existing System:
 - a. Provide cylinders/cores keyed into Owner's existing factory registered keying system. Comply with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference.
- B. Requirements:
 1. Permanent Keying:
 - a. Provide permanent cylinders/cores keyed by the manufacturer according to the following key system.
 - 1) Master Keying system as directed by the Owner.
 - b. Forward biting list and keys separately from cylinders, by means as directed by Owner. Failure to comply with forwarding requirements will be cause for replacement of cylinders/cores involved at no additional cost to Owner.
 - c. Provide keys with the following features:
 - 1) Material: Nickel silver; minimum thickness of .107-inch (2.3mm)
 - d. Identification:
 - 1) Mark permanent cylinders/cores and keys with applicable blind code for identification. Do not provide blind code marks with actual key cuts.

- 2) Identification stamping provisions must be approved by the Architect and Owner.
 - 3) Stamp cylinders/cores and keys with Owner's unique key system facility code as established by the manufacturer; key symbol and embossed or stamped with "DO NOT DUPLICATE".
 - 4) Failure to comply with stamping requirements will be cause for replacement of keys involved at no additional cost to Owner.
 - 5) Forward permanent cylinders/cores to Owner, separately from keys, by means as directed by Owner.
- e. Quantity: Furnish in the following quantities.
- 1) Change (Day) Keys: 3 per cylinder/core that is keyed differently

2.09 DOOR CLOSERS

- A. Manufacturers and Products:
1. Scheduled Manufacturer and Product:
 - a. Falcon SC70A series
 2. Acceptable Manufacturers and Products:
 - a. Norton 7500 series
 - b. Sargent 351 series
- B. Requirements:
1. Provide door closers conforming to ANSI/BHMA A156.4 Grade 1 requirements by BHMA certified independent testing laboratory. ISO 9000 certify closers. Stamp units with date of manufacture code.
 2. Provide door closers with fully hydraulic, full rack and pinion action with aluminum cylinder.
 3. Closer Body: 1-1/2-inch (1.5 inch (38 mm)) diameter with 5/8-inch (0.63 inch (16 mm)) diameter heat-treated pinion journal.
 4. Hydraulic Fluid: Fireproof, passing requirements of UL10C, and requiring no seasonal closer adjustment for temperatures ranging from 120 degrees Fahrenheit (48.89 degrees Celsius) to -30 degrees Fahrenheit (-1.11 degrees Celsius).
 5. Spring Power: Continuously adjustable over full range of closer sizes, and providing reduced opening force as required by accessibility codes and standards.
 6. Hydraulic Regulation: By tamper-proof, non-critical valves, with separate adjustment for latch speed, general speed, and backcheck.
 7. Pressure Relief Valve (PRV) Technology: Not permitted.
 8. Provide special templates, drop plates, mounting brackets, or adapters for arms as required for details, overhead stops, and other door hardware items interfering with closer mounting.

2.10 ELECTRO-HYDRAULIC AUTOMATIC OPERATORS

- A. Manufacturers and Products:
1. Scheduled Manufacturer and Product:
 - a. LCN 4600 series
 2. Acceptable Manufacturers and Products:
 - a. Norton 6000 series
 - b. Besam Power Swing
- B. Requirements:
1. Provide low energy automatic operator units with hydraulic closer complying with ANSI/BHMA A156.19.

2. Hydraulic Fluid: Fireproof, passing requirements of UL10C, and requiring no seasonal closer adjustment for temperatures ranging from 120 degrees Fahrenheit (48.89 degrees Celsius) to -30 degrees Fahrenheit (-1.11 degrees Celsius).
3. Provide units with conventional door closer opening and closing forces unless power operator motor is activated. Provide door closer assembly with adjustable spring size, back-check, and opening and closing speed adjustment valves to control door
4. Provide units with on/off switch for manual operation, motor start up delay, vestibule interface delay, electric lock delay, and door hold open delay.
5. Provide drop plates, brackets, and adapters for arms as required for details.
6. Provide actuator switches and receivers for operation as specified.
7. Provide weather-resistant actuators at exterior applications.
8. Provide key switches with LED's, recommended and approved by manufacturer of automatic operator as required for function described in operation description of hardware group below. Cylinders: Refer to "KEYING" article, herein.
9. Provide complete assemblies of controls, switches, power supplies, relays, and parts/material recommended and approved by manufacturer of automatic operator for each individual leaf. Actuators control both doors simultaneously at pairs. Sequence operation of exterior and vestibule doors with automatic operators to allow ingress or egress through both sets of openings as directed by Architect. Locate actuators, key switches, and other controls as directed by Architect.
10. Provide units with vestibule inputs that allow sequencing operation of two units, and SPDT relay for interfacing with latching or locking devices.

2.11 DOOR TRIM

- A. Manufacturers:
 1. Scheduled Manufacturer:
 - a. Ives
 2. Acceptable Manufacturers:
 - a. Trimco
 - b. Rockwood
- B. Requirements:
 1. Provide push plates, push bars, pull plates, pulls, and hands-free reversible door pulls with diameter and length as scheduled.

2.12 OVERHEAD STOPS AND OVERHEAD STOP/HOLDERS

- A. Manufacturers:
 1. Scheduled Manufacturers:
 - a. Glynn-Johnson
 2. Acceptable Manufacturers:
 - a. Sargent
 - b. ABH
- B. Requirements:
 1. Provide overhead stop at any door where conditions do not allow for a wall stop or floor stop presents tripping hazard.

2.13 THRESHOLDS, SEALS, DOOR SWEEPS, AUTOMATIC DOOR BOTTOMS, AND GASKETING

- A. Manufacturers:
 1. Scheduled Manufacturer:

- a. Zero International
 - 2. Acceptable Manufacturers:
 - a. National Guard
 - b. Reese
 - c. Pemko
- B. Requirements:
- 1. Provide thresholds, weather-stripping, and gasketing systems as specified and per architectural details. Match finish of other items.
 - 2. Smoke- and Draft-Control Door Assemblies: Where smoke- and draft-control door assemblies are required, provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105.
 - 3. Provide door sweeps, seals, astragals, and auto door bottoms only of type where resilient or flexible seal strip is easily replaceable and readily available.
 - 4. Size thresholds 1/2 inch (12.7 mm) high by 5 inches (127 mm) wide by door width unless otherwise specified in the hardware sets or detailed in the drawings.

2.14 FINISHES

- A. Finish: BHMA 626/652 (US26D); except:
- 1. Aluminum Geared Continuous Hinges: BHMA 628 (US28)
 - 2. Push Plates, Pulls, and Push Bars: BHMA 630 (US32D)
 - 3. Overhead Stops and Holders: BHMA 630 (US32D)
 - 4. Door Closers: Powder Coat to Match
 - 5. Weatherstripping: Clear Anodized Aluminum
 - 6. Thresholds: Mill Finish Aluminum

PART 3 EXECUTION

3.01 EXAMINATION

- A. Prior to installation of hardware, examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire-rated door assembly construction, wall and floor construction, and other conditions affecting performance. Verify doors, frames, and walls have been properly reinforced for hardware installation.
- B. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.
- C. Submit a list of deficiencies in writing and proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION

- A. Mount door hardware units at heights to comply with the following, unless otherwise indicated or required to comply with governing regulations.
 - 1. Standard Steel Doors and Frames: ANSI/SDI A250.8.
 - 2. Custom Steel Doors and Frames: HMMA 831.
 - 3. Interior Architectural Wood Flush Doors: ANSI/WDMA I.S. 1A
 - 4. Installation Guide for Doors and Hardware: DHI TDH-007-20
- B. Install door hardware in accordance with NFPA 80, NFPA 101 and provide post-install inspection, testing as specified in section 1.03.E unless otherwise required to comply with

governing regulations.

- C. Install each hardware item in compliance with manufacturer's instructions and recommendations, using only fasteners provided by manufacturer.
- D. Do not install surface mounted items until finishes have been completed on substrate. Protect all installed hardware during painting.
- E. Set units level, plumb and true to line and location. Adjust and reinforce attachment substrate as necessary for proper installation and operation.
- F. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
- G. Install operating parts so they move freely and smoothly without binding, sticking, or excessive clearance.
- H. Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than quantity recommended by manufacturer for application indicated.
- I. Lock Cylinders:
 - 1. Install construction cores to secure building and areas during construction period.
 - 2. Replace construction cores with permanent cores as indicated in keying section.
 - 3. Furnish permanent cores to Owner for installation.
- J. Wiring: Coordinate with Division 26, ELECTRICAL and Division 28 ELECTRONIC SAFETY AND SECURITY sections for:
 - 1. Conduit, junction boxes and wire pulls.
 - 2. Connections to and from power supplies to electrified hardware.
 - 3. Connections to fire/smoke alarm system and smoke evacuation system.
 - 4. Connection of wire to door position switches and wire runs to central room or area, as directed by Architect.
 - 5. Connections to panel interface modules, controllers, and gateways.
 - 6. Testing and labeling wires with Architect's opening number.
- K. Continuous Hinges: Re-locate the door and frame fire rating labels where they will remain visible so that the hinge does not cover the label once installed.
- L. Door Closers & Auto Operators: Mount closers/operators on room side of corridor doors, inside of exterior doors, and stair side of stairway doors from corridors. Mount closers/operators so they are not visible in corridors, lobbies and other public spaces unless approved by Architect.
- M. Overhead Stops/Holders: Mount overhead stops/holders on room side of corridor doors, inside of exterior doors, and stair side of stairway doors.
- N. Power Supplies: Locate power supplies as indicated or, if not indicated, above accessible ceilings or in equipment room, or alternate location as directed by Architect.
- O. Thresholds: Set thresholds in full bed of sealant complying with requirements specified in Division 07 Section "Joint Sealants."
- P. Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they may impede traffic or present tripping hazard.

- Q. Door Bottoms and Sweeps: Apply to bottom of door, forming seal with threshold when door is closed.

3.03 ADJUSTING

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.
1. Door Closers: Adjust sweep period to comply with accessibility requirements and requirements of authorities having jurisdiction.
- B. Occupancy Adjustment: Approximately three to six months after date of Substantial Completion, examine and readjust each item of door hardware, including adjusting operating forces, as necessary to ensure function of doors and door hardware.

3.04 CLEANING AND PROTECTION

- A. Clean adjacent surfaces soiled by door hardware installation.
- B. Clean operating items per manufacturer's instructions to restore proper function and finish.
- C. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of Substantial Completion.

3.05 DOOR HARDWARE SCHEDULE

- A. The intent of the hardware specification is to specify the hardware for interior and exterior doors, and to establish a type, continuity, and standard of quality. However, it is the door hardware supplier's responsibility to thoroughly review existing conditions, schedules, specifications, drawings, and other Contract Documents to verify the suitability of the hardware specified.
- B. Discrepancies, conflicting hardware, and missing items are to be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application.
- C. Hardware items are referenced in the following hardware schedule. Refer to the above specifications for special features, options, cylinders/keying, and other requirements.
- D. Hardware Sets: To be issued by Addendum.

END OF SECTION

SECTION 08 80 00 GLAZING

PART 1 GENERAL

1.01 SCOPE

- A. General Provisions: Attention is directed to the Contract and General Conditions and all sections within Division 1 General Requirements which are hereby made a part of this section of the Specifications.
- B. Description of Work:
 - 1. Work Included: Provide labor, materials and equipment necessary to complete the work of this section, including but not limited to the following:
 - a. Glass and glazing for the following products and applications:
 - 1) Steel frames and sidelights specified in Section 08 11 13 HOLLOW METAL DOORS AND FRAMES.
 - 2) Lites in Wood Doors specified in Section 08 14 00 WOOD DOORS.
 - 2. Related Work: The following items are not included in this section and are specified under the designated sections:
 - a. Section 08 11 00 HOLLOW METAL DOORS AND FRAMES for borrowed lites.
- C. Definitions:
 - 1. Manufacturers of Glass Products: Firms that produce primary glass, fabricated glass, or both, as defined in referenced glazing publications.
 - 2. Glass Thicknesses: Indicated by thickness designations in millimeters according to ASTM C1036.
 - 3. Interspace: Space between lites of an insulating-glass unit that contains dehydrated air or a specified gas.
 - 4. Deterioration of Coated Glass: Defects developed from normal use that are attributed to the manufacturing process and not to causes other than glass breakage and practices for maintaining and cleaning coated glass contrary to manufacturer's written instructions. Defects include peeling, cracking, and other indications of deterioration in metallic coating.
 - 5. Deterioration of Insulating Glass: Failure of hermetic seal under normal use that is attributed to the manufacturing process and not to causes other than glass breakage and practices for maintaining and cleaning insulating glass contrary to manufacturer's written instructions. Evidence of failure is the obstruction of vision by dust, moisture, or film on interior surfaces of glass.
 - 6. Deterioration of Laminated Glass: Defects developed from normal use that are attributed to the manufacturing process and not to causes other than glass breakage and practices for maintaining and cleaning laminated glass contrary to manufacturer's written instructions. Defects include edge separation, delamination materially obstructing vision through glass, and blemishes exceeding those allowed by referenced laminated-glass standard.
- D. Performance Requirements:
 - 1. General: Provide glazing systems capable of withstanding normal thermal movement and wind and impact loads (where applicable) without failure, including loss or glass breakage attributable to the following: defective manufacture, fabrication, and installation; failure of sealants or gaskets to remain watertight and airtight; deterioration of glazing materials; or other defects in construction.

2. Glass Design: Glass thickness designations indicated are minimums and are for detailing only. Confirm glass thicknesses by analyzing project loads and in-service conditions. Provide glass lites in the thickness designations indicated for various size openings, but not less than thicknesses and in strengths (annealed or heat treated) required to meet or exceed the following criteria:
 - a. Glass Thicknesses: Select minimum glass thicknesses to comply with ASTM E1300, according to the following requirements:
 - 1) Specified Design Wind Loads: As required by Code.
 - 2) Specified Design Snow Loads for Sloped Glazing: As required by Code.
 - 3) Probability of Breakage for Vertical Glazing: 8 lites per 1,000 for lites set vertically or not more than 15 degrees off vertical and under wind action.
 - (a) Load Duration: 60 seconds or less.
 - 4) Probability of Breakage for Sloped Glazing: 1 lite per 1,000 for lites set more than 15 degrees off vertical and under wind and snow action.
 - (a) Load Duration: 30 days.
 - 5) Maximum Lateral Deflection: For the following types of glass supported on all 4 edges, provide thickness required that limits center deflection at design wind pressure to 1/50 times the short side length or 1", whichever is less.
 - (a) For monolithic-glass lites heat-treated to resist wind loads.
 - (b) For insulating glass.
 - 6) Minimum Glass Thickness for Exterior Lites: Not less than 1/4".
3. Thermal Movements: Provide glazing that allows for thermal movements resulting from the following maximum change (range) in ambient and surface temperatures acting on glass framing members and glazing components. Base engineering calculation on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
 - a. Temperature Change (Range): 120F, ambient; 180F, material surfaces.
4. Thermal and Optical Performance Properties: Provide glass with performance properties specified based on manufacturer's published test data, as determined according to procedures indicated below:
 - a. For monolithic-glass lites, properties are based on units with lites 6 mm thick.
 - b. For insulating-glass units, properties are based on units with lites 6 mm thick and a nominal 1/2" wide interspace.
 - c. Center-of-Glass Values: Based on using LBL-44789 WINDOW 6.3 computer program for the following methodologies:
 - 1) U-Factors: NFRC 100 expressed as btu/s.f. x H x deg F.
 - 2) Solar Heat Gain Coefficient: NFRC 200.
 - 3) Solar Optical Properties: NFRC 300.
5. Specific Hazardous Locations: The following shall be considered specific hazardous locations for purposes of glazing.
 - a. Glazing in ingress and means of egress doors.
 - b. Glazing adjacent to a door and within the same wall plane as the door whose nearest vertical edge is within 24" of the door in a closed position and whose bottom edge is less than 60" above the floor or walking surface, unless an intervening interior permanent wall is between the door and the glazing.
 - c. Glazing in fixed panels having a glazed area in excess of 9 s.f. with the lowest edge less than 18" above the finish floor level or walking surface within 36" of such glazing, unless a horizontal member not less than 1-1/2" in width is located between 24" and 36" above the walking surface.

E. Submittals:

1. Product Data: For each glass product and glazing material indicated.
2. Samples: 12" square samples for each type of glass and glass assembly, glazing sealants.

3. Glazing Schedule: Use same designations indicated on Drawings for glazed openings in preparing a schedule listing glass types and thicknesses for each size opening and location.
4. Product Certificates: Signed by manufacturers of glass and glazing products certifying that products furnished comply with requirements.
 - a. For solar-control low-e-coated glass, provide documentation demonstrating that manufacturer of coated glass is certified by coating manufacturer.
5. Qualification Data: For installers.
6. Pre-Construction Adhesion and Compatibility Test Report: From glazing sealant manufacturer indicating glazing sealants were tested for adhesion to glass and glazing channel substrates and for compatibility with glass and other glazing materials.
7. Product Test Reports: For each type of glazing products.
8. Warranties: Special warranties specified in this section.

F. Quality Assurance:

1. Installer Qualifications: An experienced installer who has completed glazing similar in material, design, and extent to that indicated for this project; whose work has resulted in glass installations with a record of successful in-service performance.
2. Source Limitations for Glass: Obtain the following through one source from a single manufacturer for each glass type: clear float glass, laminated glass and insulating glass.
3. Source Limitations for Glass Sputter-Coated with Solar-Control Low-E Coatings: Where solar control low-e coatings of a primary glass manufacturer that has established a certified fabricator program is specified, obtain sputter-coated solar-control low-e-coated glass in fabricated units from a manufacturer that is certified by coated-glass manufacturer.
4. Source Limitations for Glazing Accessories: Obtain glazing accessories through one source from a single manufacturer for each product and installation method indicated.
5. Elastomeric Glazing Sealant Product Testing: Obtain sealant test results for product test reports in "Submittals" Article from a qualified testing agency based on testing current sealant formulations within a 36-month period.
 - a. Sealant Testing Agency Qualifications: An independent testing agency qualified according to ASTM C1021 to conduct the testing indicated.
 - b. Test elastomeric glazing sealants for compliance with requirements specified by reference to ASTM C920, and where applicable, to other standard test methods.
6. Pre-Construction Adhesion and Compatibility Testing: Submit to elastomeric glazing sealant manufacturers, for testing indicated below, samples of each glazing material type, tape sealant, gasket, glazing accessory, and glass-framing member that will contact or affect elastomeric glazing sealants:
 - a. Use ASTM C1087 to determine whether priming and other specific joint preparation techniques are required to obtain rapid, optimum adhesion of glazing sealants to glass, tape sealants, gaskets, and glazing channel substrates.
 - b. Submit not fewer than eight pieces of each type of material, including joint substrates, shims, joint-sealant backings, secondary seals, and miscellaneous materials.
 - c. Schedule sufficient time for testing and analyzing results to prevent delaying the work.
 - d. For materials failing tests, obtain sealant manufacturer's written instructions for corrective measures, including the use of specially formulated primers.
 - e. Testing will not be required if elastomeric glazing sealant manufacturers submit data based on previous testing of current sealant products for adhesion to, and compatibility with, glazing materials matching those submitted.
7. Safety Glazing Products: Comply with testing requirements in 16 CFR 1201.
 - a. Subject to compliance with requirements, obtain safety glazing products permanently marked with certification label of the Safety Glazing Certification Council or another certification agency] acceptable to authorities having jurisdiction.

- b. Where glazing units, including Kind FT glass and laminated glass, are specified in Part 2 articles for glazing lites more than 9 s.f. in exposed surface area of one side, provide glazing products that comply with Category II materials, for lites 9 s.f. or less in exposed surface area of one side, provide glazing products that comply with Category I or II materials, except for hazardous locations where Category II materials are required by 16 CFR 1201 and regulations of authorities having jurisdiction.
 - c. Provide tempered glass where required by code.
 - 8. Glazing Publications: Comply with published recommendations of glass product manufacturers and organizations below, unless more stringent requirements are indicated. Refer to these publications for glazing terms not otherwise defined in this section or in referenced standards.
 - a. GANA Publications: GANA Laminated Division's "Laminated Glass Design Guide" and GANA's "Glazing Manual."
 - b. AAMA Publications: AAMA GDSG-1, "Glass Design for Sloped Glazing," and AAMA TIR-A7, "Sloped Glazing Guidelines."
 - c. IGMA Publication for Sloped Glazing: IGMA TB-3001, "Sloped Glazing Guidelines."
 - d. IGMA Publication for Insulating Glass: SIGMA TM-3000, "Glazing Guidelines for Sealed Insulating Glass Units."
 - 9. Insulating-Glass Certification Program: Permanently marked either on spacers or on at least one component lite of units with appropriate certification label of the following testing and inspecting agency:
 - a. Insulating Glass Certification Council.
- G. Delivery, Storage and Handling:
 - 1. Protect glazing materials according to manufacturer's written instructions and as needed to prevent damage to glass and glazing materials from condensation, temperature changes, direct exposure to sun, or other causes.
 - 2. For insulating-glass units that will be exposed to substantial altitude changes, comply with insulating-glass manufacturer's written recommendations for venting and sealing to avoid hermetic seal ruptures.
- H. Project Conditions:
 - 1. Environmental Limitations: Do not proceed with glazing when ambient and substrate temperature conditions are outside limits permitted by glazing material manufacturers and when glazing channel substrates are wet from rain, frost, condensation, or other causes.
 - a. Do not install liquid glazing sealants when ambient and substrate temperature conditions are outside limits permitted by glazing sealant manufacturer or below 40F.
- I. Warranty:
 - 1. Manufacturer's Special Warranty for Coated-Glass Products: Manufacturer's standard form, made out to the Owner and signed by coated-glass manufacturer agreeing to replace coated glass units that deteriorate as defined in "Definitions" Article, f.o.b. the nearest shipping point to project site, within specified warranty periods indicated below.
 - a. Warranty Period: Ten years from date of Substantial Completion.
 - 2. Manufacturer's Special Warranty on Insulating Glass: Manufacturer's standard form, made out to the Owner and signed by coated-glass manufacturer agreeing to replace coated glass units that deteriorate as defined in "Definitions" Article, f.o.b. the nearest shipping point to project site, within specified warranty periods indicated below.
 - a. Warranty Period: Ten years from date of Substantial Completion.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Primary Glass: Provide products from one of the following:
 - 1. Vitro / PPG, Ford City, Pennsylvania
 - 2. Guardian, Carleton, Michigan
 - 3. LOF, Toledo, Ohio
 - 4. AFG, Kingsport, Tennessee
- B. Clear Fire Protective Ceramic Glazing Fabricators; provide products from the following: FireLite by Nippon electric Glass Company, LTD and distributed by Technical Glass Products, Snoqualmie, Washington.

2.02 GLASS TYPES

- A. Tempered Float Glass: ASTM C1048; Type I (transparent flat glass); Quality-Q3; Kind FT.
- B. Glass Ceramic: Clear Premium Finish
- C. Coated Glass: Pyrolytic and vacuum deposited coatings on glass in conformance with ASTM C1376.
- D. Insulating Glass Units, General: Factory assembled units consisting of sealed lites of glass separated by a dehydrated interpane air space, and complying with ASTM E2190 and with requirements specified in this section.

2.03 INTERIOR DOOR AND BORROWED LITE GLAZING

- A. Glass for Interior Non-Fire Rated Doors: Shall be 1/4" clear tempered safety glass.
 - 1. Glass for Interior Fire Rated Doors: Shall be 3/16" clear fire rated glass ceramic.
 - 2. Glass for Interior Fire Rated Sidelites and Borrowed Lites: Shall be 3/16" clear fire rated glass ceramic.

2.04 INSULATING GLASS UNITS

- A. Insulating Glass Units / Storefront Systems: Provide 1" thick tempered insulating glass consisting of two lites of 1/4" with Solarban 60 Optigray Low-E coating on second surface and 90% argon, COG U-Factor (Winter) 0.29, U-Factor (Summer) 0.27 and SHGC 0.30 max at all exterior openings.

2.05 GLAZING SEALANTS

- A. General: Provide products of type indicated, complying with the following requirements:
 - 1. Compatibility: Verify glazing sealants that are compatible with one another and with other materials they will contact, including glass products, seals of insulating-glass units, interlayer of laminated glass, and glazing channel substrates, under conditions of service and application, as demonstrated by sealant manufacturer based on testing and field experience.
 - 2. Suitability: Comply with sealant and glass manufacturers' written instructions for selecting glazing sealants suitable for applications indicated and for conditions existing at time of installation.

3. Colors of Exposed Glazing Sealants: As selected by Architect from manufacturer's full range.
 4. Adhesives and sealants that are used inside the weatherproofing system shall comply with the following limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24):
 - a. Structural Glazing Adhesives: 100 G/L.
 - b. Architectural Sealants: 250 g/L.
- B. Elastomeric Glazing Sealants: Comply with ASTM C920 and other requirements indicated for each liquid-applied chemically curing sealant specified, including those referencing ASTM C920 classifications for type, grade, class, and uses related to exposure and joint substrates.
1. Single-Component Neutral- and Basic-Curing Silicone Glazing Sealants:
 - a. Dow Corning Corporation; 790.
 - b. GE Silicones; SilPruf LM SCS2700.
 - c. Tremco Inc.; Spectrem 1.

2.06 GLAZING TAPES

- A. Back-Bedding Mastic Glazing Tapes: Preformed, butyl-based elastomeric tape with a solids content of 100%; non-staining and non-migrating in contact with non-porous surfaces; with or without spacer rod as recommended in writing by tape and glass manufacturers for application indicated; packaged on rolls with a release paper backing; and complying with ASTM C1281 and AAMA 800 for project conditions.
- B. Expanded Cellular Glazing Tapes: Closed-cell, PVC foam tapes; factory coated with adhesive on both surfaces; packaged on rolls with release liner protecting adhesive; and complying with AAMA 800 for the following types:
1. Type 1, for glazing applications in which tape acts as the primary sealant.
 2. Type 2, for glazing applications in which tape is used in combination with a full bead of liquid sealant.

2.07 MISCELLANEOUS GLAZING MATERIALS

- A. General: Provide products of material, size, and shape complying with referenced glazing standard, requirements of manufacturers of glass and other glazing materials for application indicated, and with a proven record of compatibility with surfaces contacted in installation.
- B. Cleaners, Primers, and Sealers: Types recommended by sealant or gasket manufacturer.
- C. Setting Blocks: Elastomeric material with a Shore, Type A durometer hardness of 85, plus or minus 5.
- D. Spacers: Elastomeric blocks or continuous extrusions with a Shore, Type A durometer hardness required by glass manufacturer to maintain glass lites in place for installation indicated.
- E. Edge Blocks: Elastomeric material of hardness needed to limit glass lateral movement (side walking).

2.08 FABRICATION OF GLAZING UNITS

- A. Fabricate glazing units in sizes required to glaze openings indicated for project, with edge and face clearances, edge and surface conditions, and bite complying with written instructions of product manufacturer and referenced glazing publications, to comply with system performance

requirements.

- B. Clean-cut or flat-grind vertical edges of butt-glazed monolithic lites in a manner that produces square edges with slight kerfs at junctions with outdoor and indoor faces.
- C. Grind smooth and polish exposed glass edges and corners.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine framing glazing, with installer present, for compliance with the following:
 - 1. Manufacturing and installation tolerances, including those for size, squareness, and offsets at corners.
 - 2. Presence and functioning of weep system.
 - 3. Minimum required face or edge clearances.
 - 4. Effective sealing between joints of glass-framing members.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

- A. Clean glazing channels and other framing members receiving glass immediately before glazing. Remove coatings not firmly bonded to substrates.

3.03 GLAZING, GENERAL

- A. Comply with combined written instructions of manufacturers of glass, sealants, gaskets, and other glazing materials, unless more stringent requirements are indicated, including those in referenced glazing publications.
- B. Glazing channel dimensions, as indicated on Drawings, provide necessary bite on glass, minimum edge and face clearances, and adequate sealant thicknesses, with reasonable tolerances. Adjust as required by project conditions during installation.
- C. Protect glass edges from damage during handling and installation. Remove damaged glass from project site and legally dispose of off project site. Damaged glass is glass with edge damage or other imperfections that, when installed, could weaken glass and impair performance and appearance.
- D. Apply primers to joint surfaces where required for adhesion of sealants, as determined by pre-construction sealant-substrate testing.
- E. Install setting blocks in sill rabbets, sized and located to comply with referenced glazing publications, unless otherwise required by glass manufacturer. Set blocks in thin course of compatible sealant suitable for heel bead.
- F. Do not exceed edge pressures stipulated by glass manufacturers for installing glass lites.
- G. Provide spacers for glass lites where length plus width is larger than 50" as follows:
 - 1. Locate spacers directly opposite each other on both inside and outside faces of glass. Install correct size and spacing to preserve required face clearances, unless gaskets and glazing tapes are used that have demonstrated ability to maintain required face clearances and to comply with system performance requirements.

2. Provide 1/8" minimum bite of spacers on glass and use thickness equal to sealant width. With glazing tape, use thickness slightly less than final compressed thickness of tape.
- H. Provide edge blocking where indicated or needed to prevent glass lites from moving sideways in glazing channel, as recommended in writing by glass manufacturer and according to requirements in referenced glazing publications.
- I. Set glass lites in each series with uniform pattern, draw, bow, and similar characteristics.

3.04 TAPE GLAZING

- A. Position tapes on fixed stops so that, when compressed by glass, their exposed edges are flush with or protrude slightly above sightline of stops.
- B. Install tapes continuously, but not necessarily in one continuous length. Do not stretch tapes to make them fit opening.
- C. Cover vertical framing joints by applying tapes to heads and sills first and then to jambs. Cover horizontal framing joints by applying tapes to jambs and then to heads and sills.
- D. Place joints in tapes at corners of opening with adjoining lengths butted together, not lapped. Seal joints in tapes with compatible sealant approved by tape manufacturer.
- E. Do not remove release paper from tape until just before each glazing unit is installed.
- F. Center glass lites in openings on setting blocks and press firmly against tape by inserting dense compression gaskets formed and installed to lock in place against faces of removable stops. Start gasket applications at corners and work toward centers of openings.

3.05 SEALANT GLAZING (WET)

- A. Install continuous spacers, or spacers combined with cylindrical sealant backing, between glass lites and glazing stops to maintain glass face clearances and to prevent sealant from extruding into glass channel and blocking weep systems until sealants cure. Secure spacers or spacers and backings in place and in position to control depth of installed sealant relative to edge clearance for optimum sealant performance.
- B. Force sealants into glazing channels to eliminate voids and to ensure complete wetting or bond of sealant to glass and channel surfaces.
- C. Tool exposed surfaces of sealants to provide a substantial wash away from glass.

3.06 CLEANING AND PROTECTION

- A. Protect exterior glass from damage immediately after installation by attaching crossed streamers to framing held away from glass. Do not apply markers to glass surface. Remove non-permanent labels, and clean surfaces.
- B. Protect glass from contact with contaminating substances resulting from construction operations, including weld splatter. If, despite such protection, contaminating substances do come into contact with glass, remove substances immediately as recommended by glass manufacturer.
- C. Examine glass surfaces adjacent to or below exterior concrete and other masonry surfaces at frequent intervals during construction, but not less than once a month, for buildup of dirt, scum,

alkaline deposits, or stains; remove as recommended in writing by glass manufacturer.

- D. Remove and replace glass that is broken, chipped, cracked, or abraded or that is damaged from natural causes, accidents, and vandalism, during construction period.

END OF SECTION

DIVISION IX
Finishes

SECTION 09 21 16 GYPSUM BOARD

PART 1 GENERAL

1.01 A. SCOPE

- A. This Section covers providing all labor, materials, and equipment necessary for complete installation of gypsum board (GWB), gypsum sheathing, metal support systems, metal accessories, fasteners, and related items necessary as indicated.
 - 1. Gypsum board types, sizes, and thicknesses indicated.
 - a. Unless indicated otherwise, ceilings, soffits, and bulkheads which are indicated as GWB shall be 5/8" thick.
 - b. Gypsum panels shall have fire resistant ratings as indicated.
- B. Related Documents: The provisions of the Sections included under Division 1, General Requirements, are included as a part of this Section as though bound herein.
- C. Related Work Specified Elsewhere:
 - 1. Section 05 40 00 COLD-FORMED METAL FRAMING: For metal stud framing.
 - 2. Section 07 20 00 BUILDING INSULATION: For acoustic insulation.
 - 3. Section 07 84 00 FIRESTOPPING: For firestopping systems and fire resistance rated joint sealants.
- D. Definitions: Gypsum Board Construction Terminology: Refer to ASTM C11 and GA-505 for definitions of terms related to gypsum board assemblies not defined in this Section or in other referenced standards.
- E. Submittals: Submit manufacturer's product data and installation instructions for each gypsum drywall component, including other data as may be required to show compliance with these Specifications.
- F. Quality Assurance:
 - 1. Materials or operations specified by reference to the published specifications of a manufacturer or other published standards shall comply with the requirements of the standards listed.
 - a. Standards include ASTM C840 and GA-216.
 - 2. Refer to "Recommended Specification on Levels of Gypsum Board Finish" as published by the Gypsum Association (and AWCI/CISCA/PDCA) for finish levels required herein.
 - 3. Fire-Test-Response Characteristics: Where fire rated gypsum board assemblies are indicated, provide materials and construction identical to those of assemblies tested for fire resistance per ASTM E119 by an independent testing and inspecting agency acceptable to authorities having jurisdiction.
 - 4. Single Source Responsibility for Finishing Materials: Obtain finishing materials from either the same manufacturer that supplies gypsum board and other panel products or from a manufacturer acceptable to the gypsum board manufacturer.
- G. Delivery, Storage, and Handling:
 - 1. Deliver materials in original packages, containers, or bundles bearing brand name and identification of manufacturer or supplier.
 - 2. Store materials inside under cover and keep them dry and protected from weather, direct sunlight, surface contamination, corrosion, construction traffic, and other causes. Neatly stack gypsum panels flat to prevent sagging.

3. Handle gypsum board to prevent damage to edges, ends, and surfaces. Do not bend or otherwise damage metal corner beads and trim.
- H. Project Conditions:
1. Environmental Conditions, General: Establish and maintain environmental conditions for applying and finishing gypsum board to comply with ASTM C840 and with gypsum board manufacturer's recommendations.
 2. Ventilation: Ventilate building spaces, as required, for dry joint treatment materials. Avoid drafts during hot dry weather to prevent finishing materials from drying too rapidly.

PART 2 PRODUCTS

2.01 MANUFACTURER

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. Gypsum Products:
 - a. National Gypsum Company, Buffalo, New York
 - b. United States Gypsum Company, Chicago, Illinois
 - c. Georgia Pacific, Portland, Oregon
- B. Products of other manufacturers will be considered for acceptance provided they equal or exceed the material requirements and functional qualities of the specified product. Requests for Architect's approval must be accompanied by the "Substitution Request Form" and complete technical data for evaluation. All materials for evaluation must be received by the Architect at least 5 working days prior to bid due date. Additional approved manufacturers will be issued by Addendum.
1. Refer to Section 00 20 00 INSTRUCTIONS TO BIDDERS and Section 01 25 00 SUBSTITUTION REQUEST FORM for additional requirements.

2.02 GYPSUM BOARD PRODUCTS

- A. Standard Gypsum Board: Shall be 5/8" thick meeting ASTM C36. Panels shall be 4' wide with tapered edges.
1. Provide type "X" panels unless noted otherwise on the drawings.
- B. Abuse Resistant Gypsum Board Panels: Shall be 5/8" thick and meet ASTM C1396 and ASTM C1629. Panels shall be 4' wide with tapered edges. Provide where indicated on the Drawings.

2.03 MISCELLANEOUS MATERIALS

- A. Joint treatment materials and adhesives shall be as recommended by the gypsum board manufacturer. Joint tape shall be paper reinforcing tape, unless otherwise recommended by gypsum board manufacturer for use with setting type compound.
1. Setting Type Joint Compounds for Gypsum Board: Factory packaged, job mixed, chemical hardening powder products formulated for use indicated.
 - a. Where setting type joint compounds are indicated as a taping compound only or for taping and filling only, use formulation that is compatible with other joint compounds applied over it.
 - b. For prefilling gypsum board joints, use formulation recommended by gypsum board manufacturer.
 2. Drying Type Joint Compounds for Gypsum Board: Factory packaged vinyl based products complying with the following requirements for formulation and intended use.

- a. Ready Mixed Formulation: Factory mixed product.
 - 1) Topping compound formulated for finish (third) coats.
 - 2) All purpose compound formulated for topping compound.
- B. Screws for Gypsum Board (((ASTM C1002))) : Phillips head steel Type "S" or "S-12" self-drilling screws, length and type as required and recommended by gypsum board manufacturer.
- C. Accessories for Interior Installation: Corner bead, edge trim, and control joints complying with ASTM C1047 and requirements indicated below:
 - 1. Material: Formed metal with metal complying with the following requirements:
 - a. Steel sheet zinc coated by hot-dip or electrolytic process, or steel sheet coated with aluminum or rolled zinc.
 - b. Do not use plastic accessories.
 - 2. Shapes indicated below by reference Figure 1 designations in ASTM C1047:
 - a. Corner bead on outside corners, unless otherwise indicated.
 - 1) Product shall be similar to "Dur-A-Bead Corner Bead (103)"; USG or as approved by board manufacturer and Architect.
 - b. L-bead with face flange only; face flanged formed to receive joint compound. Use L-beads for edge trim (perimeter relief).
 - 1) Product shall be similar to "No. 200-B Metal Trim"; USG or as approved by board manufacturer and Architect.
 - c. One piece control joint formed with V-shaped slot and removable strip covering slot opening.
 - 1) Product shall be similar to "No. 093 Control Joint"; USG or as approved by board manufacturer and Architect.
- D. Reveal Drywall Trim: Shall be as manufactured by Fry Reglet Corp.
 - 1. "Reveal Molding": 5/8" x 5/8", DRM-625-625.
- E. Spot Grout: ASTM C475, setting type joint compound recommended for spot grouting hollow metal door frames.
- F. Asphalt Saturated Organic Felt: ASTM D 226, Type I (No. 15 asphalt felt), non-perforated.
- G. Foam Gaskets: Closed cell vinyl foam adhesive backed strips that allow fastener penetration without foam displacement, 1/8" thick, in width to suit metal stud size indicated.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine substrates to which gypsum board assemblies attach or abut, installed hollow metal frames, and structural framing with Installer present for compliance with requirements for installation tolerances and other conditions affecting performance of assemblies specified in this Section. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.02 GYPSUM BOARD APPLICATION METHODS

- A. Gypsum Board Application and Finishing Standards: Install and finish gypsum panels to comply with ASTM C840 and GA-216.

- B. Work shall be provided in accordance with the manufacturer's printed instructions and as specified herein. Where fire rating requirements for systems are indicated on the Drawings or in the schedules, install components in accordance with manufacturer's instructions to comply with indicated fire rating requirements.
- C. Wallboard joints shall be butted tightly together. Maximum allowable gap at end joints shall be 1/8". Support end joints on framing members.
 - 1. On partitions/walls apply gypsum panels vertically, unless parallel application is required for fire-resistive-rated assemblies. Use maximum length panels to minimize end joints.
 - 2. Install ceiling boards in direction, either parallel or perpendicular to framing, members, which results in the least number of joints. Install in maximum practical lengths to span with minimum number of end (butt) joints. Stagger end joints of adjoining boards.
 - 3. Fire Rated Walls: Construct required rated wall using thickness of Type "X" gypsum board required by code, installed to code requirements.
 - 4. Do not attach wallboard to head track.
 - 5. Provide a minimum of 1/4" perimeter relief where board abuts different materials. Trim edges with U-bead edge trim, where edges of gypsum panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.
- D. Openings cut in gypsum board to fit electrical outlets, plumbing, and piping shall fit snugly and shall be small enough to be covered by plates and escutcheons. Both face and back paper shall be cut for cutouts which are not made by use of a saw.
- E. Fasteners: Install fasteners no closer than 3/8" to end or edge. Space fasteners approximately 7" o.c., opposite each other on adjacent ends or edges. Begin fastening from center of wallboard and proceed toward outer end or edges.
- F. Apply pressure on gypsum board, adjacent to fasteners being driven, to insure that gypsum board will be secured tightly to framing member. Check for looseness at fasteners. Drive fastener with shank reasonably perpendicular to face of board.
- G. Drive screws with power screwdriver as recommended by gypsum board manufacturer. Surface of head shall be below surface of paper without cutting paper.
- H. Joint and corner treatment shall be in accordance with the manufacturer's printed instructions to provide a finished surface, ready for painting. Surface shall be free of dimples, excess finishing compound, ridges, or untrue corners.
 - 1. Install edge trim where edge of gypsum panels would otherwise be exposed or semi-exposed. Provide edge trim type with face flange formed to receive joint compound except where other types are indicated.
- I. Provide control joints in gypsum board walls, bulkheads, ceilings, and soffits as follows:
 - 1. At door and borrowed lite openings (both jambs).
 - 2. Furring or column fireproofing abuts a structural element (except floor) or dissimilar wall or ceiling.
 - 3. Ceiling or soffit abuts a structural element, dissimilar wall or partition or other vertical penetration.
 - 4. Construction changes within plane of ceiling.
 - 5. Furring run exceeds 30', unless noted otherwise.
 - 6. Ceiling dimensions exceed 40' in either direction.
 - 7. Wings of "L", "U", and "T"-shaped ceiling areas are joined.
 - 8. USG Control Joint No. 093: Apply over face of gypsum board where specified. Cut to length with a fine-toothed hacksaw (32 teeth per inch). Cut end joints square, butt

together, and align to provide neat fit. Attach control joint to gypsum board with fasteners spaced 6" o.c. maximum along each flange. Remove plastic tape after finishing with joint compound or veneer finish.

- a. Leave a 1/2" continuous opening between gypsum boards for insertion of surface-mounted joint.
 - b. Do not attach gypsum board to steel studs on one side of control joint.
 - c. Provide separate supports for each control joint flange.
 - d. Provide an adequate seal behind control joint where sound or fire ratings are prime considerations.
- J. Spot grout hollow metal door frames: Apply grout at each jamb anchor clip and immediately insert gypsum panels into frames.

3.03 FINISHING GYPSUM BOARD ASSEMBLIES

- A. Levels of Finish: The following levels of finish are established as a guide for specific final finishes in accordance with GA-214.
1. Level 0: No taping, finishing, or accessories required. This level of finish shall be used in temporary construction only.
 2. Level 1: Joints and interior angles shall have tape embedded in joint compound. Surface shall be free of excess joint compound. Tool marks and ridges are acceptable. This finish level shall be used in plenum areas above ceilings, in attics, in areas where the assembly is concealed.
 3. Level 2: Joints and interior angles shall have tape embedded in joint compound, and one separate coat of joint compound applied over joints, angles, fastener heads, and accessories. Surface shall be free of excess joint compound. Tool marks and ridges are acceptable. This finish level shall be used where water resistant gypsum backing board (ASTM C630) is used as a substrate for tile only.
 4. Level 3: Joints and interior angles shall have tape embedded in joint compound, and two separate coats of joint compound applied over joints, angles, fastener heads, and accessories. Joint compound shall be smooth and free of tool marks and ridges. Note: It is recommended that the prepared surface be coated with a primer/sealer prior to the application of final finishes. See painting/wall covering specification in this regard. This final level shall be used in areas which are to receive heavy textured, thick (1/8" or greater) wall coverings.
 5. Level 4: Joints and interior angles shall have tape embedded in joint compound, and three separate coats of joint compound applied over joints, angles, fastener heads, and accessories. Joint compound shall be smooth and free of tool marks and ridges. Note: Prepare surface to be coated with a primer/sealer prior to the application of final finishes. This finish level shall be used where textured finishes, wall coverings, and painted (flat or eggshell) finishes are to be applied.
- B. Use the following joint compound combination as applicable to the finish levels specified:
1. Embedding and First Coat: Setting type joint compound. Fill (Second) Coat: Setting type joint compound. Finish (Third) Coat: Ready mixed, drying type, all purpose or topping compound.

END OF SECTION

SECTION 09 91 23
INTERIOR PAINTING

PART 1 GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. Section includes surface preparation and the application of paint systems on the following interior substrates:
 - 1. Concrete.
 - 2. Gypsum board.

1.03 DEFINITIONS

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

1.04 ACTION SUBMITTALS

- A. Product Data: For each type of product. Include preparation requirements and application instructions.
 - 1. Include Printout of current "MPI Approved Products List" for each product category specified, with the proposed product highlighted.
 - 2. Indicate VOC content.
- B. Samples for Initial Selection: For each type of topcoat product.
- C. Samples for Verification: For each type of paint system and in each color and gloss of topcoat.
 - 1. Submit Samples on rigid backing, 8 inches (203.2 mm) square.
 - 2. Apply coats on Samples in steps to show each coat required for system.
 - 3. Label each coat of each Sample.
 - 4. Label each Sample for location and application area.

- D. Product List: Cross-reference to paint system and locations of application areas. Use same designations indicated on Drawings and in schedules. Include color designations.

1.05 MAINTENANCE MATERIAL SUBMITTALS

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

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 degrees Fahrenheit (7.22 degrees Celsius).
 - 1. Maintain containers in clean condition, free of foreign materials and residue.
 - 2. Remove rags and waste from storage areas daily.

1.07 FIELD CONDITIONS

- A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 degrees Fahrenheit (35 degrees Celsius).
- B. Do not apply paints when relative humidity exceeds 85 percent; at temperatures less than 5 degrees Fahrenheit (-15 degrees Celsius) above the dew point; or to damp or wet surfaces.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide product by the following:
 - 1. ICI/Devco – Elkhart Housing Authority Supplier: O'Leary Paint, 24615 CR 45, Elkhart, IN (574) 389-8704, Contact: Neal Albert.

2.02 PAINT, GENERAL

- A. MPI Standards: Products shall comply with MPI standards indicated and shall be listed in its "MPI Approved Products Lists."
- B. Material Compatibility:
 - 1. Materials for use within each paint system shall be compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
 - 2. For each coat in a paint system, products shall be recommended in writing by topcoat manufacturers for use in paint system and on substrate indicated.
- C. Colors: Match existing: O'Leary Paint, Special White, 7900 tintable white base, latex semi gloss.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
 - 1. Concrete: 12 percent.
 - 2. Fiber-Cement Board: 12 percent.
 - 3. Masonry (Clay and CMUs): 12 percent.
 - 4. Wood: 15 percent.
 - 5. Gypsum Board: 12 percent.
 - 6. Plaster: 12 percent.
- C. Gypsum Board Substrates: Verify that finishing compound is sanded smooth.
- D. Plaster Substrates: Verify that plaster is fully cured.
- E. Verify suitability of substrates, including surface conditions and compatibility, with existing finishes and primers.
- F. Proceed with coating application only after unsatisfactory conditions have been corrected.
 - 1. Application of coating indicates acceptance of surfaces and conditions.

3.02 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual" applicable to substrates and paint systems indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
 - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
- C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
 - 1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.
- D. Concrete Substrates: Remove release agents, curing compounds, efflorescence, and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces to be painted exceeds that permitted in manufacturer's written instructions.
- E. Masonry Substrates: Remove efflorescence and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces or mortar joints exceeds that permitted in manufacturer's written instructions.
- F. Steel Substrates: Remove rust, loose mill scale, and shop primer, if any. Clean using methods recommended in writing by paint manufacturer.

- G. Shop-Primed Steel Substrates: Clean field welds, bolted connections, and areas where shop paint is abraded. Paint exposed areas with the same material as used for shop priming to comply with SSPC-PA 1 for touching up shop-primed surfaces.
- H. Galvanized-Metal Substrates: Remove grease and oil residue from galvanized sheet metal by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.
- I. Aluminum Substrates: Remove loose surface oxidation.
- J. Wood Substrates:
 - 1. Scrape and clean knots, and apply coat of knot sealer before applying primer.
 - 2. Sand surfaces that will be exposed to view, and dust off.
 - 3. Prime edges, ends, faces, undersides, and backsides of wood.
 - 4. After priming, fill holes and imperfections in the finish surfaces with putty or plastic wood filler. Sand smooth when dried.

3.03 APPLICATION

- A. Apply paints according to manufacturer's written instructions and to recommendations in "MPI Manual."
 - 1. Use applicators and techniques suited for paint and substrate indicated.
 - 2. Paint surfaces behind movable equipment and furniture same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
 - 3. Paint front and backsides of access panels, removable or hinged covers, and similar hinged items to match exposed surfaces.
 - 4. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
 - 5. Primers specified in painting schedules may be omitted on items that are factory primed or factory finished if acceptable to topcoat manufacturers.
- B. Tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Tint undercoats to match color of topcoat, but provide sufficient difference in shade of undercoats to distinguish each separate coat.
- C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

3.04 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and

leave in an undamaged condition.

- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.05 INTERIOR PAINTING SCHEDULE

- A. Concrete Substrates, Nontraffic Surfaces:
 - 1. Institutional Low-Odor/VOC Latex System:
 - a. Prime Coat: Primer sealer, interior, institutional low odor/VOC.
 - b. Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.
 - c. Topcoat: Latex, interior, institutional low odor/VOC, semi-gloss (MPI Gloss Level 5).
- B. CMU Substrates:
 - 1. Institutional Low-Odor/VOC Latex System:
 - a. Block Filler: Block filler, latex, interior/exterior.
 - b. Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.
 - c. Topcoat: Latex, interior, institutional low odor/VOC, semi-gloss (MPI Gloss Level 5).
 - d. Topcoat: Latex, interior, institutional low odor/VOC, gloss (MPI Gloss Level 6).
- C. Steel Substrates:
 - 1. Institutional Low-Odor/VOC Latex System:
 - a. Prime Coat: Primer, rust inhibitive, water based.
 - b. Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.
 - c. Topcoat: Latex, interior, institutional low odor/VOC, semi-gloss (MPI Gloss Level 5).
- D. Fiberglass Substrates:
 - 1. Institutional Low-Odor/VOC Latex System:
 - a. Prime Coat: Primer, bonding, water based.
 - b. Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.
 - c. Topcoat: Latex, interior, institutional low odor/VOC, semi-gloss (MPI Gloss Level 5).
- E. Plastic Substrates:
 - 1. Institutional Low-Odor/VOC Latex System:
 - a. Prime Coat: Primer, bonding, solvent based.
 - b. Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.
 - c. Topcoat: Latex, interior, institutional low odor/VOC, semi-gloss (MPI Gloss Level 5).
- F. Gypsum Board and Plaster Substrates:
 - 1. Institutional Low-Odor/VOC Latex System:
 - a. Prime Coat: Primer sealer, interior, institutional low odor/VOC.
 - b. Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.
 - c. Topcoat: Latex, interior, institutional low odor/VOC, semi-gloss (MPI Gloss Level 5).

END OF SECTION

DIVISION X thru DIVISION XXV
Not Used

DIVISION XXVI
Electrical

**SECTION 26 05 05
SELECTIVE DEMOLITION FOR ELECTRICAL**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Electrical demolition.

PART 2 PRODUCTS

2.01 MATERIALS AND EQUIPMENT

- A. Materials and equipment for patching and extending work: As specified in individual sections.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that abandoned wiring and equipment serve only abandoned facilities.
- B. Beginning of demolition means installer accepts existing conditions.

3.02 PREPARATION

- A. Disconnect electrical systems in walls, floors, and ceilings to be removed.
- B. Coordinate utility service outages with utility company.
- C. Provide temporary wiring and connections to maintain existing systems in service during construction. When work must be performed on energized equipment or circuits, use personnel experienced in such operations.
- D. Existing Electrical Service: Maintain existing system in service until new system is complete and ready for service. Disable system only to make switchovers and connections. Minimize outage duration.
 - 1. Obtain permission from Owner at least 24 hours before partially or completely disabling system.
 - 2. Make temporary connections to maintain service in areas adjacent to work area.

3.03 DEMOLITION AND EXTENSION OF EXISTING ELECTRICAL WORK

- A. Remove, relocate, and extend existing installations to accommodate new construction.
- B. Remove abandoned wiring to source of supply.
- C. Remove exposed abandoned conduit, including abandoned conduit above accessible ceiling finishes. Cut conduit flush with walls and floors, and patch surfaces.
- D. Disconnect abandoned outlets and remove devices. Remove abandoned outlets if conduit servicing them is abandoned and removed. Provide blank cover for abandoned outlets that are not removed.

- E. Repair adjacent construction and finishes damaged during demolition and extension work.
- F. Maintain access to existing electrical installations that remain active. Modify installation or provide access panel as appropriate.

END OF SECTION

SECTION 26 05 19
LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

PART 1 GENERAL

1.01 SCOPE

- A. Conductor and Cable Requirements.
- B. Wiring connectors.
- C. Electrical tape.
- D. Wire pulling lubricant.
- E. Cable ties.
- F. Firestop sleeves.

1.02 RELATED SECTIONS

- A. Section 07 84 00 - Firestopping.
- B. Section 26 05 05 - Selective Demolition for Electrical: Disconnection, removal, and/or extension of existing electrical conductors and cables.
- C. Section 26 05 26 - Grounding and Bonding for Electrical Systems: Additional requirements for grounding conductors and grounding connectors.

1.03 REFERENCE STANDARDS

- A. ASTM B3 - Standard Specification for Soft or Annealed Copper Wire; 2013 (Reapproved 2018).
- B. ASTM B8 - Standard Specification for Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard, or Soft; 2023.
- C. ASTM B33 - Standard Specification for Tin-Coated Soft or Annealed Copper Wire for Electrical Purposes; 2010, with Editorial Revision (2020).
- D. ASTM B787/B787M - Standard Specification for 19 Wire Combination Unilay-Stranded Copper Conductors for Subsequent Insulation; 2004 (Reapproved 2020).
- E. ASTM D3005 - Standard Specification for Low-Temperature Resistant Vinyl Chloride Plastic Pressure-Sensitive Electrical Insulating Tape; 2017.
- F. NECA 1 - Standard for Good Workmanship in Electrical Construction; 2023.
- G. NECA 121 - Standard for Installing Nonmetallic-Sheathed Cable (Type NM-B) and Underground Feeder and Branch-Circuit Cable (Type UF); 2007.
- H. NEMA WC 70 - Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy; 2021.

- I. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- J. UL 44 - Thermoset-Insulated Wires and Cables; Current Edition, Including All Revisions.
- K. UL 83 - Thermoplastic-Insulated Wires and Cables; Current Edition, Including All Revisions.
- L. UL 267 - Outline of Investigation for Wire-Pulling Compounds; Current Edition, Including All Revisions.
- M. UL 486A-486B - Wire Connectors; Current Edition, Including All Revisions.
- N. UL 486C - Splicing Wire Connectors; Current Edition, Including All Revisions.
- O. UL 510 - Polyvinyl Chloride, Polyethylene, and Rubber Insulating Tape; Current Edition, Including All Revisions.

1.04 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide manufacturer's standard catalog pages and data sheets for conductors and cables, including detailed information on materials, construction, ratings, listings, and available sizes, configurations, and stranding.
- C. Design Data: Indicate voltage drop and ampacity calculations for aluminum conductors substituted for copper conductors. Include proposed modifications to raceways, boxes, wiring gutters, enclosures, etc. to accommodate substituted conductors.
- D. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation, and installation of product.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Receive, inspect, handle, and store conductors and cables in accordance with manufacturer's instructions.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Anixter
- B. American Insulated Wire Corporation
- C. Belden Wire and Cable
- D. Triangle PWC, Inc.
- E. Pirelli Cable Corporation
- F. Southwire Company

G. Rome Cable Corporation

H. Approved Equal

2.02 CONDUCTOR AND CABLE GENERAL REQUIREMENTS

- A. Provide products that comply with requirements of NFPA 70.
- B. Provide products listed, classified, and labeled as suitable for the purpose intended.
- C. Unless specifically indicated to be excluded, provide all required conduit, boxes, wiring, connectors, etc. as required for a complete operating system.
- D. Comply with NEMA WC 70.
- E. Thermoplastic-Insulated Conductors and Cables: Listed and labeled as complying with UL 83.
- F. Thermoset-Insulated Conductors and Cables: Listed and labeled as complying with UL 44.
- G. Conductors for Grounding and Bonding: Also comply with Section 26 05 26.
- H. Conductor Material:
 - 1. Copper Conductors: Soft drawn annealed, 98 percent conductivity, uncoated copper conductors complying with ASTM B3, ASTM B8, or ASTM B787/B787M unless otherwise indicated.
 - 2. Tinned Copper Conductors: Comply with ASTM B33.
- I. Minimum Conductor Size:
 - 1. Branch Circuits: 12 AWG.
 - a. Exceptions:
 - 1) 20 A, 120 V circuits longer than 100 feet (30 m): 10 AWG, for voltage drop.
 - 2. Control Circuits: 14 AWG.
- J. Conductor Insulation:
 - 1. Insulation types shall be as follows unless noted otherwise:
 - a. No. 8 AWG, or larger wire: Type RHW, THWN or XHHW. XHHW for interior use only.
 - b. Smaller than No. 8 AWG: Type THWN, THHN, XHHW, except that 16 AWG wire for Class 2 remote control circuits and signal circuits may be commercial fixture wire Type RF-2 or TF. XHHW for interior use only.
 - c. All wire from CT cabinet to panels: Types RHH, THHN or SA.
 - 2. Low voltage cables run in air handling plenums without conduit shall have an approved fire retardant insulating jacket.
- K. Where conductor size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.
- L. Conductor Color Coding:
 - 1. Color code conductors as indicated unless otherwise required by the authority having jurisdiction. Maintain consistent color coding throughout project.
 - 2. Color Coding Method: Integrally colored insulation.
 - 3. Color Code:
 - a. 208Y/120 V, 3 Phase, 4 Wire System:
 - 1) Phase A: Black.

- 2) Phase B: Red.
- 3) Phase C: Blue.
- 4) Neutral/Grounded: White.
- b. 240/120 V, 1 Phase, 3 Wire System:
 - 1) Phase A: Black.
 - 2) Phase B: Red.
 - 3) Neutral/Grounded: White.
- c. Equipment Ground, All Systems: Green.

2.03 WIRING CONNECTORS

- A. Description: Wiring connectors appropriate for the application, suitable for use with the conductors to be connected, and listed as complying with UL 486A-486B or UL 486C as applicable.
- B. Connectors for Grounding and Bonding: Comply with Section 26 05 26.

2.04 ACCESSORIES

- A. Electrical Tape:
 - 1. Vinyl Insulating Electrical Tape: Complying with ASTM D3005 and listed as complying with UL 510; minimum thickness of 7 mil (0.18 mm); resistant to abrasion, corrosion, and sunlight; conformable for application down to 0 degrees F (-18 degrees C) and suitable for continuous temperature environment up to 221 degrees F (105 degrees C).
- B. Wire Pulling Lubricant:
 - 1. Listed and labeled as complying with UL 267.
 - 2. Suitable for use with conductors/cables and associated insulation/jackets to be installed.
 - 3. Suitable for use at installation temperature.
- C. Cable Ties: Material and tensile strength rating suitable for application.
- D. Firestop Sleeves: Listed; provide as required to preserve fire resistance rating of building elements.
- E. Fire-Protective Coating for Electrical Conductors and Cables: Field-applied, intumescent or ablative coating designed to prevent ignition and propagation of fire along thermoplastic-insulated conductors and cables.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that interior of building has been protected from weather.
- B. Verify that work likely to damage wire and cable has been completed.
- C. Verify that raceways, boxes, and equipment enclosures are installed and are properly sized to accommodate conductors and cables in accordance with NFPA 70.
- D. Verify that field measurements are as indicated.
- E. Verify that conditions are satisfactory for installation prior to starting work.

3.02 PREPARATION

- A. Clean raceways thoroughly to remove foreign materials before installing conductors and cables.

3.03 INSTALLATION

- A. Conductors to be continuous from outlet to outlet, junction box, terminal box, etc.
- B. Hold splices to a minimum, make in readily accessible junction, pull or outlet boxes and insulate to equal the conductor insulation. Make splices and connections in a manner approved by all applicable codes. No branch circuit shall be spliced more than twice.
- C. Color code all service, feeder and branch circuit wire as called for in item 2.02-L of this Specification and in accordance with Article 210 of the NEC.
- D. Provide all wire with identification within each enclosure where a tap, splice or termination is made.
- E. Install products in accordance with manufacturer's instructions.
- F. Perform work in accordance with NECA 1 (general workmanship).
- G. Install nonmetallic-sheathed cable (Type NM-B) in accordance with NECA 121.
- H. Installation in Raceway:
 - 1. Tape ends of conductors and cables to prevent infiltration of moisture and other contaminants.
 - 2. Pull all conductors and cables together into raceway at same time.
 - 3. Do not damage conductors and cables or exceed manufacturer's recommended maximum pulling tension and sidewall pressure.
 - 4. Use suitable wire pulling lubricant where necessary, except when lubricant is not recommended by the manufacturer.
- I. Exposed Cable Installation (only where specifically permitted):
 - 1. Route cables parallel or perpendicular to building structural members and surfaces.
 - 2. Protect cables from physical damage.
- J. Paralleled Conductors: Install conductors of the same length and terminate in the same manner.
- K. Secure and support conductors and cables in accordance with NFPA 70 using suitable supports and methods approved by the authority having jurisdiction. Provide independent support from building structure. Do not provide support from raceways, piping, ductwork, or other systems.
- L. Terminate cables using suitable fittings.
- M. Install conductors with a minimum of 12 inches (300 mm) of slack at each outlet.
- N. Neatly train and bundle conductors inside boxes, wireways, panelboards and other equipment enclosures.

- O. Group or otherwise identify neutral/grounded conductors with associated ungrounded conductors inside enclosures in accordance with NFPA 70.
- P. Make wiring connections using specified wiring connectors.
 - 1. Make splices and taps only in accessible boxes. Do not pull splices into raceways or make splices in conduit bodies or wiring gutters.
 - 2. Remove appropriate amount of conductor insulation for making connections without cutting, nicking or damaging conductors.
 - 3. Do not remove conductor strands to facilitate insertion into connector.
 - 4. Clean contact surfaces on conductors and connectors to suitable remove corrosion, oxides, and other contaminates. Do not use wire brush on plated connector surfaces.
- Q. Insulate splices and taps that are made with uninsulated connectors using methods suitable for the application, with insulation and mechanical strength at least equivalent to unspliced conductors.
- R. Insulate ends of spare conductors using vinyl insulating electrical tape.
- S. Install firestopping to preserve fire resistance rating of partitions and other elements, using materials and methods specified in Section 07 84 00.
- T. Unless specifically indicated to be excluded, provide final connections to all equipment and devices, including those furnished by others, as required for a complete operating system.

END OF SECTION

SECTION 26 05 26
GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

PART 2 PRODUCTS

1.01 GROUNDING AND BONDING REQUIREMENTS

- A. Do not use products for applications other than as permitted by NFPA 70 and product listing.
- B. Unless specifically indicated to be excluded, provide all required components, conductors, connectors, conduit, boxes, fittings, supports, accessories, etc. as necessary for a complete grounding and bonding system.
- C. Where conductor size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.

1.02 GROUNDING AND BONDING COMPONENTS

- A. General Requirements:
 - 1. Provide products listed, classified, and labeled as suitable for the purpose intended.
 - 2. Provide products listed and labeled as complying with UL 467 where applicable.
- B. Conductors for Grounding and Bonding, in Addition to Requirements of Section 26 05 26:
 - 1. Use insulated copper conductors unless otherwise indicated.
 - a. Exceptions:
 - 1) Use bare copper conductors where installed underground in direct contact with earth.
 - 2) Use bare copper conductors where directly encased in concrete (not in raceway).
- C. Connectors for Grounding and Bonding:
 - 1. Description: Connectors appropriate for the application and suitable for the conductors and items to be connected; listed and labeled as complying with UL 467.
 - 2. Unless otherwise indicated, use exothermic welded connections for underground, concealed and other inaccessible connections.
 - 3. Unless otherwise indicated, use mechanical connectors, compression connectors, or exothermic welded connections for accessible connections.

END OF SECTION

SECTION 26 05 33.13
CONDUIT FOR ELECTRICAL SYSTEMS

PART 1 GENERAL

1.01 SCOPE

- A. Flexible metal conduit (FMC).
- B. Galvanized steel electrical metallic tubing (EMT).

1.02 RELATED SECTIONS

- A. Section 07 84 00 - Firestopping.
- B. Section 26 05 19 - Low-Voltage Electrical Power Conductors and Cables: Cable assemblies consisting of conductors protected by integral metal armor.
- C. Section 26 05 26 - Grounding and Bonding for Electrical Systems.
- D. Section 26 05 29 - Hangers and Supports for Electrical Systems.
- E. Section 26 05 33.16 - Boxes for Electrical Systems.

1.03 REFERENCE STANDARDS

- A. ANSI C80.3 - American National Standard for Electrical Metallic Tubing -- Steel (EMT-S); 2020.
- B. NECA 1 - Standard for Good Workmanship in Electrical Construction; 2023.
- C. NECA 101 - Standard for Installing Steel Conduits (Rigid, IMC, EMT); 2020.
- D. NEMA FB 1 - Fittings, Cast Metal Boxes, and Conduit Bodies for Conduit, Electrical Metallic Tubing, and Cable; 2014.
- E. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- F. UL 1 - Flexible Metal Conduit; Current Edition, Including All Revisions.
- G. UL 514B - Conduit, Tubing, and Cable Fittings; Current Edition, Including All Revisions.
- H. UL 797 - Electrical Metallic Tubing-Steel; Current Edition, Including All Revisions.
- I. UL 1242 - Electrical Intermediate Metal Conduit-Steel; Current Edition, Including All Revisions.

1.04 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements for submittals procedures.
- B. Product Data: Provide manufacturer's standard catalog pages and data sheets for conduits and fittings.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Receive, inspect, handle, and store conduit and fittings in accordance with manufacturer's instructions.

PART 2 PRODUCTS

2.01 CONDUIT APPLICATIONS

- A. Do not use conduit and associated fittings for applications other than as permitted by NFPA 70, manufacturer's instructions, and product listing.
- B. Unless otherwise indicated and where not otherwise restricted, use conduit types indicated for specified applications. Where more than one listed application applies, comply with most restrictive requirements. Where conduit type for particular application is not specified, use galvanized steel rigid metal conduit.
- C. Exposed, Interior, Not Subject to Physical Damage: Use galvanized steel electrical metallic tubing (EMT).

2.02 CONDUIT - GENERAL REQUIREMENTS

- A. Comply with NFPA 70.
- B. Existing Work: Where existing conduits are indicated to be reused, they may be reused only where they comply with specified requirements, are free from corrosion, and integrity is verified by pulling mandrel through them.
- C. Provide conduit, fittings, supports, and accessories required for complete raceway system.
- D. Provide products listed, classified, and labeled as suitable for purpose intended.
- E. Where conduit size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.

2.03 FLEXIBLE METAL CONDUIT (FMC)

- A. Manufacturers:
 - 1. Allied Tube and Conduit, a division of Atkore International.
 - 2. LVT Steel.
 - 3. Triangle PWC.
 - 4. Approved Equal.
- B. Description: NFPA 70, Type FMC standard-wall steel flexible metal conduit listed and labeled as complying with UL 1, and listed for use in classified firestop systems.
- C. Fittings:
 - 1. Description: Fittings complying with NEMA FB 1 and listed and labeled as complying with UL 514B.
 - 2. Material: Use steel.

2.04 GALVANIZED STEEL ELECTRICAL METALLIC TUBING (EMT)

- A. Manufacturers:
 - 1. Allied Tube & Conduit, a division of Atkore International.
 - 2. LVT Steel.
 - 3. Triangle PWC.
 - 4. Approved Equal.
- B. Description: NFPA 70, Type EMT galvanized steel electrical metallic tubing complying with ANSI C80.3 and listed and labeled as complying with UL 797.
- C. Fittings:
 - 1. Description: Fittings complying with NEMA FB 1 and listed and labeled as complying with UL 514B.
 - 2. Material: Use steel.
 - 3. Connectors and Couplings: Use compression/gland or set-screw type.
 - a. Do not use indenter type connectors and couplings.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements are as indicated.
- B. Verify that mounting surfaces are ready to receive conduits.
- C. Verify that conditions are satisfactory for installation prior to starting work.

3.02 INSTALLATION

- A. Install products in accordance with manufacturer's instructions.
- B. Install conduit in accordance with NECA 1.
- C. Galvanized Steel Rigid Metal Conduit (RMC): Install in accordance with NECA 101.
- D. Intermediate Metal Conduit (IMC): Install in accordance with NECA 101.
- E. Conduit Routing:
 - 1. Conceal conduits unless specifically indicated to be exposed.
 - 2. Arrange conduit to maintain adequate headroom, clearances, and access.
 - 3. Arrange conduit to provide no more than 150 feet (46 m) between pull points.
 - 4. Route conduits above water and drain piping where possible.
- F. Conduit Support:
 - 1. Secure and support conduits in accordance with NFPA 70 using suitable supports and methods approved by authorities having jurisdiction; see Section 26 05 29.
 - 2. Provide independent support from building structure. Do not provide support from piping, ductwork, or other systems.
 - 3. Installation Above Suspended Ceilings: Do not provide support from ceiling support system. Do not provide support from ceiling grid or allow conduits to lay on ceiling tiles.

G. Connections and Terminations:

1. Use approved zinc-rich paint or conduit joint compound on field-cut threads of galvanized steel conduits prior to making connections.
2. Where two threaded conduits must be joined and neither can be rotated, use three-piece couplings or split couplings. Do not use running threads.
3. Use suitable adapters where required to transition from one type of conduit to another.
4. Terminate threaded conduits in boxes and enclosures using threaded hubs or double lock nuts for dry locations and raintight hubs for wet locations.
5. Provide insulating bushings, insulated throats, or listed metal fittings with smooth, rounded edges at conduit terminations to protect conductors.
6. Secure joints and connections to provide mechanical strength and electrical continuity.

H. Penetrations:

1. Do not penetrate or otherwise notch or cut structural members, including footings and grade beams, without approval of Structural Engineer.
2. Make penetrations perpendicular to surfaces unless otherwise indicated.
3. Provide sleeves for penetrations as indicated or as required to facilitate installation. Set sleeves flush with exposed surfaces unless otherwise indicated or required.
4. Conceal bends for conduit risers emerging above ground.
5. Where conduits penetrate waterproof membrane, seal as required to maintain integrity of membrane.
6. Make penetrations for roof-mounted equipment within associated equipment openings and curbs where possible to minimize roofing system penetrations. Where penetrations are necessary, seal as indicated or as required to preserve integrity of roofing system and maintain roof warranty.
7. Install firestopping to preserve fire resistance rating of partitions and other elements; see Section 07 84 00.

I. Conduit Movement Provisions: Where conduits are subject to movement, provide expansion and expansion/deflection fittings to prevent damage to enclosed conductors or connected equipment. This includes, but is not limited to:

1. Where conduits cross structural joints intended for expansion, contraction, or deflection.
2. Where conduits are subject to earth movement by settlement or frost.

J. Conduit Sealing:

1. Use foam conduit sealant to prevent entry of moisture and gases. This includes, but is not limited to:
 - a. Where conduits enter building from outside.
 - b. Where service conduits enter building from underground distribution system.
 - c. Where conduits enter building from underground.
 - d. Where conduits may transport moisture to contact live parts.
2. Where conduits cross barriers between areas of potential substantial temperature differential, use foam conduit sealant at accessible point near penetration to prevent condensation. This includes, but is not limited to:
 - a. Where conduits pass from outdoors into conditioned interior spaces.
 - b. Where conduits pass from unconditioned interior spaces into conditioned interior spaces.

K. Provide grounding and bonding; see Section 26 05 26.

3.03 CLEANING

- A. Clean interior of conduits to remove moisture and foreign matter.

3.04 PROTECTION

- A. Immediately after installation of conduit, use suitable manufactured plugs to provide protection from entry of moisture and foreign material and do not remove until ready for installation of conductors.

END OF SECTION

SECTION 26 05 33.16
BOXES FOR ELECTRICAL SYSTEMS

PART 1 GENERAL

1.01 SCOPE

- A. Outlet and device boxes up to 100 cubic inches (1,650 cu cm), including those used as junction and pull boxes.
- B. Cabinets and enclosures, including junction and pull boxes larger than 100 cubic inches (1,650 cu cm).
- C. Boxes and enclosures for integrated power, data, and audio/video.

1.02 RELATED REQUIREMENTS

- A. Section 07 84 00 - Firestopping.
- B. Section 26 05 26 - Grounding and Bonding for Electrical Systems.
- C. Section 26 05 29 - Hangers and Supports for Electrical Systems.
- D. Section 26 05 33.13 - Conduit for Electrical Systems:
 - 1. Conduit bodies and other fittings.
- E. Section 26 27 26 - Wiring Devices:
 - 1. Wall plates.

1.03 REFERENCE STANDARDS

- A. NECA 1 - Standard for Good Workmanship in Electrical Construction; 2023.
- B. NECA 130 - Standard for Installing and Maintaining Wiring Devices; 2016.
- C. NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum); 2020.
- D. NEMA FB 1 - Fittings, Cast Metal Boxes, and Conduit Bodies for Conduit, Electrical Metallic Tubing, and Cable; 2014.
- E. NEMA OS 1 - Sheet-Steel Outlet Boxes, Device Boxes, Covers, and Box Supports; 2013 (Reaffirmed 2020).
- F. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- G. UL 50 - Enclosures for Electrical Equipment, Non-Environmental Considerations; Current Edition, Including All Revisions.
- H. UL 50E - Enclosures for Electrical Equipment, Environmental Considerations; Current Edition, Including All Revisions.
- I. UL 508A - Industrial Control Panels; Current Edition, Including All Revisions.

- J. UL 514A - Metallic Outlet Boxes; Current Edition, Including All Revisions.

1.04 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide manufacturer's standard catalog pages and data sheets for cabinets and enclosures, boxes for hazardous (classified) locations, floor boxes, and underground boxes/enclosures.
- C. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation, and installation of product.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Receive, inspect, handle, and store products in accordance with manufacturer's instructions.

PART 2 PRODUCTS

2.01 BOXES

- A. General Requirements:
 - 1. Do not use boxes and associated accessories for applications other than as permitted by NFPA 70 and product listing.
 - 2. Provide all boxes, fittings, supports, and accessories required for a complete raceway system and to accommodate devices and equipment to be installed.
 - 3. Provide products listed, classified, and labeled as suitable for the purpose intended.
 - 4. Where box size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.
 - 5. Provide grounding terminals within boxes where equipment grounding conductors terminate.
- B. Outlet and Device Boxes Up to 100 cubic inches (1,650 cu cm), Including Those Used as Junction and Pull Boxes:
 - 1. Use sheet-steel boxes for dry locations unless otherwise indicated or required.
 - 2. Use raised covers suitable for the type of wall construction and device configuration where required.
 - 3. Use shallow boxes where required by the type of wall construction.
 - 4. Do not use "through-wall" boxes designed for access from both sides of wall.
 - 5. Sheet-Steel Boxes: Comply with NEMA OS 1, and list and label as complying with UL 514A.
 - 6. Boxes for Supporting Luminaires and Ceiling Fans: Listed as suitable for the type and weight of load to be supported; furnished with fixture stud to accommodate mounting of luminaire where required.
 - 7. Boxes for Ganged Devices: Use multigang boxes of single-piece construction. Do not use field-connected gangable boxes unless specifically indicated or permitted.
 - 8. Wall Plates: Comply with Section 26 27 26.
 - 9. Manufacturers:
 - a. Appleton.
 - b. B-Line.
 - c. Racor.

- d. Steel City.
 - e. Approved Equals.
- C. Cabinets and Enclosures, Including Junction and Pull Boxes Larger Than 100 cubic inches (1,650 cu cm):
- 1. Comply with NEMA 250, and list and label as complying with UL 50 and UL 50E, or UL 508A.
 - 2. NEMA 250 Environment Type, Unless Otherwise Indicated:
 - 3. Junction and Pull Boxes Larger Than 100 cubic inches (1,650 cu cm):
 - a. Provide screw-cover or hinged-cover enclosures unless otherwise indicated.
- D. Boxes and Enclosures for Integrated Power, Data, and Audio/Video: Size and configuration as indicated or as required with partitions to separate services; field-connected gangable boxes may be used.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements are as indicated.
- B. Verify that mounting surfaces are ready to receive boxes.
- C. Verify that conditions are satisfactory for installation prior to starting work.

3.02 INSTALLATION

- A. Install products in accordance with manufacturer's instructions.
- B. Install boxes in accordance with NECA 1 (general workmanship) and, where applicable, NECA 130, including mounting heights specified in those standards where mounting heights are not indicated.
- C. Arrange equipment to provide minimum clearances in accordance with manufacturer's instructions and NFPA 70.
- D. Flush-mount boxes in finished areas unless specifically indicated to be surface-mounted.
- E. Box Locations:
 - 1. Install all outlet boxes in accessible locations.
 - 2. Fire Resistance Rated Walls: Install flush-mounted boxes such that the required fire resistance will not be reduced.
- F. Box Supports:
 - 1. Secure and support boxes in accordance with NFPA 70 using suitable supports and methods approved by the authority having jurisdiction.
 - 2. Provide independent support from building structure. Do not provide support from piping, ductwork, or other systems.
 - 3. Installation Above Suspended Ceilings: Do not provide support from ceiling grid or ceiling support system.
- G. Install boxes plumb and level.

H. Flush-Mounted Boxes:

1. Install boxes in noncombustible materials such as concrete, tile, gypsum, plaster, etc. so that front edge of box or associated raised cover is not set back from finished surface more than 1/4 inch (6 mm) or does not project beyond finished surface.
2. Install boxes in combustible materials such as wood so that front edge of box or associated raised cover is flush with finished surface.
3. Repair rough openings around boxes in noncombustible materials such as concrete, tile, gypsum, plaster, etc. so that there are no gaps or open spaces greater than 1/8 inch (3 mm) at the edge of the box.

I. Install boxes as required to preserve insulation integrity.

J. Install permanent barrier between ganged wiring devices when voltage between adjacent devices exceeds 300 V.

K. Install firestopping to preserve fire resistance rating of partitions and other elements, using materials and methods specified in Section 07 84 00.

L. Close unused box openings.

M. Install blank wall plates on junction boxes and on outlet boxes with no devices or equipment installed or designated for future use.

N. Provide grounding and bonding in accordance with Section 26 05 26.

3.03 CLEANING

A. Clean interior of boxes to remove dirt, debris, plaster and other foreign material.

3.04 PROTECTION

A. Immediately after installation, protect boxes from entry of moisture and foreign material until ready for installation of conductors.

END OF SECTION

SECTION 26 27 26 WIRING DEVICES

PART 1 GENERAL

1.01 SCOPE

- A. Receptacles.
- B. Wall plates and covers.

1.02 RELATED SECTIONS

- A. Section 26 05 19 - Low-Voltage Electrical Power Conductors and Cables: Manufactured wiring systems for use with access floor boxes with compatible pre-wired connectors.
- B. Section 26 05 26 - Grounding and Bonding for Electrical Systems.
- C. Section 26 05 33.16 - Boxes for Electrical Systems.

1.03 REFERENCE STANDARDS

- A. FS W-C-596 - Connector, Electrical, Power, General Specification for; 2014h (Validated 2022).
- B. FS W-S-896 - Switches, Toggle (Toggle and Lock), Flush Mounted (General Specification); 2017g (Validated 2023).
- C. NECA 1 - Standard for Good Workmanship in Electrical Construction; 2023.
- D. NECA 130 - Standard for Installing and Maintaining Wiring Devices; 2016.
- E. NEMA WD 1 - General Color Requirements for Wiring Devices; 1999 (Reaffirmed 2020).
- F. NEMA WD 6 - Wiring Devices - Dimensional Specifications; 2021.
- G. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- H. UL 20 - General-Use Snap Switches; Current Edition, Including All Revisions.
- I. UL 498 - Attachment Plugs and Receptacles; Current Edition, Including All Revisions.
- J. UL 514D - Cover Plates for Flush-Mounted Wiring Devices; Current Edition, Including All Revisions.
- K. UL 1449 - Standard for Surge Protective Devices; Current Edition, Including All Revisions.

1.04 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide manufacturer's catalog information showing dimensions, colors, and configurations.

- C. Certificates for Surge Protection Receptacles: Manufacturer's documentation of listing for compliance with UL 1449.
- D. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation, and installation of product.

1.05 DELIVERY, STORAGE, AND PROTECTION

- A. Store in a clean, dry space in original manufacturer's packaging until ready for installation.

PART 2 PRODUCTS

2.01 WIRING DEVICES - GENERAL REQUIREMENTS

- A. Provide wiring devices suitable for intended use with ratings adequate for load served.
- B. Wiring Device Finishes:
 - 1. Provide wiring device finishes as described below, unless otherwise indicated.
 - 2. Wiring Devices, Unless Otherwise Indicated: Ivory with ivory nylon wall plate.

2.02 RECEPTACLES

- A. Receptacles - General Requirements: Self-grounding, complying with NEMA WD 1 and NEMA WD 6, and listed as complying with UL 498, and where applicable, FS W-C-596; types as indicated on the drawings.
 - 1. Wiring Provisions: Terminal screws for side wiring or screw actuated binding clamp for back wiring with separate ground terminal screw.
 - 2. NEMA configurations specified are according to NEMA WD 6.

2.03 WALL PLATES AND COVERS

- A. Wall Plates: Comply with UL 514D.
 - 1. Configuration: One piece cover as required for quantity and types of corresponding wiring devices.
 - 2. Size: Standard.
 - 3. Screws: Metal with slotted heads finished to match wall plate finish.
- B. Nylon Wall Plates: Smooth finish, high-impact thermoplastic.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements are as indicated.
- B. Verify that outlet boxes are installed in proper locations and at proper mounting heights and are properly sized to accommodate devices and conductors in accordance with NFPA 70.
- C. Verify that wall openings are neatly cut and will be completely covered by wall plates.

- D. Verify that final surface finishes are complete, including painting.
- E. Verify that branch circuit wiring installation is completed, tested, and ready for connection to wiring devices.
- F. Verify that conditions are satisfactory for installation prior to starting work.

3.02 PREPARATION

- A. Provide extension rings to bring outlet boxes flush with finished surface.
- B. Clean dirt, debris, plaster, and other foreign materials from outlet boxes.

3.03 INSTALLATION

- A. Perform work in accordance with NECA 1 (general workmanship) and, where applicable, NECA 130, including mounting heights specified in those standards unless otherwise indicated.
- B. Coordinate locations of outlet boxes provided under Section 26 05 33.16 as required for installation of wiring devices provided under this section.
- C. Install wiring devices in accordance with manufacturer's instructions.
- D. Install permanent barrier between ganged wiring devices when voltage between adjacent devices exceeds 300 V.
- E. Where required, connect wiring devices using pigtails not less than 6 inches (150 mm) long. Do not connect more than one conductor to wiring device terminals.
- F. Connect wiring devices by wrapping conductor clockwise 3/4 turn around screw terminal and tightening to proper torque specified by the manufacturer. Where present, do not use push-in pressure terminals that do not rely on screw-actuated binding.
- G. Unless otherwise indicated, connect wiring device grounding terminal to branch circuit equipment grounding conductor and to outlet box with bonding jumper.
- H. Install wiring devices plumb and level with mounting yoke held rigidly in place.
- I. Install wall switches with OFF position down.
- J. Install vertically mounted receptacles with grounding pole on top and horizontally mounted receptacles with grounding pole on left.
- K. Install wall plates to fit completely flush to wall with no gaps and rough opening completely covered without strain on wall plate. Repair or reinstall improperly installed outlet boxes or improperly sized rough openings. Do not use oversized wall plates in lieu of meeting this requirement.
- L. Install blank wall plates on junction boxes and on outlet boxes with no wiring devices installed or designated for future use.

3.04 ADJUSTING

- A. Adjust devices and wall plates to be flush and level.

3.05 CLEANING

- A. Clean exposed surfaces to remove dirt, paint, or other foreign material and restore to match original factory finish.

END OF SECTION

DIVISION XXVII thru DIVISION XXXII
Not Used

WATERFALL HIGH-RISE SECURITY UPGRADES

ELKHART HOUSING AUTHORITY

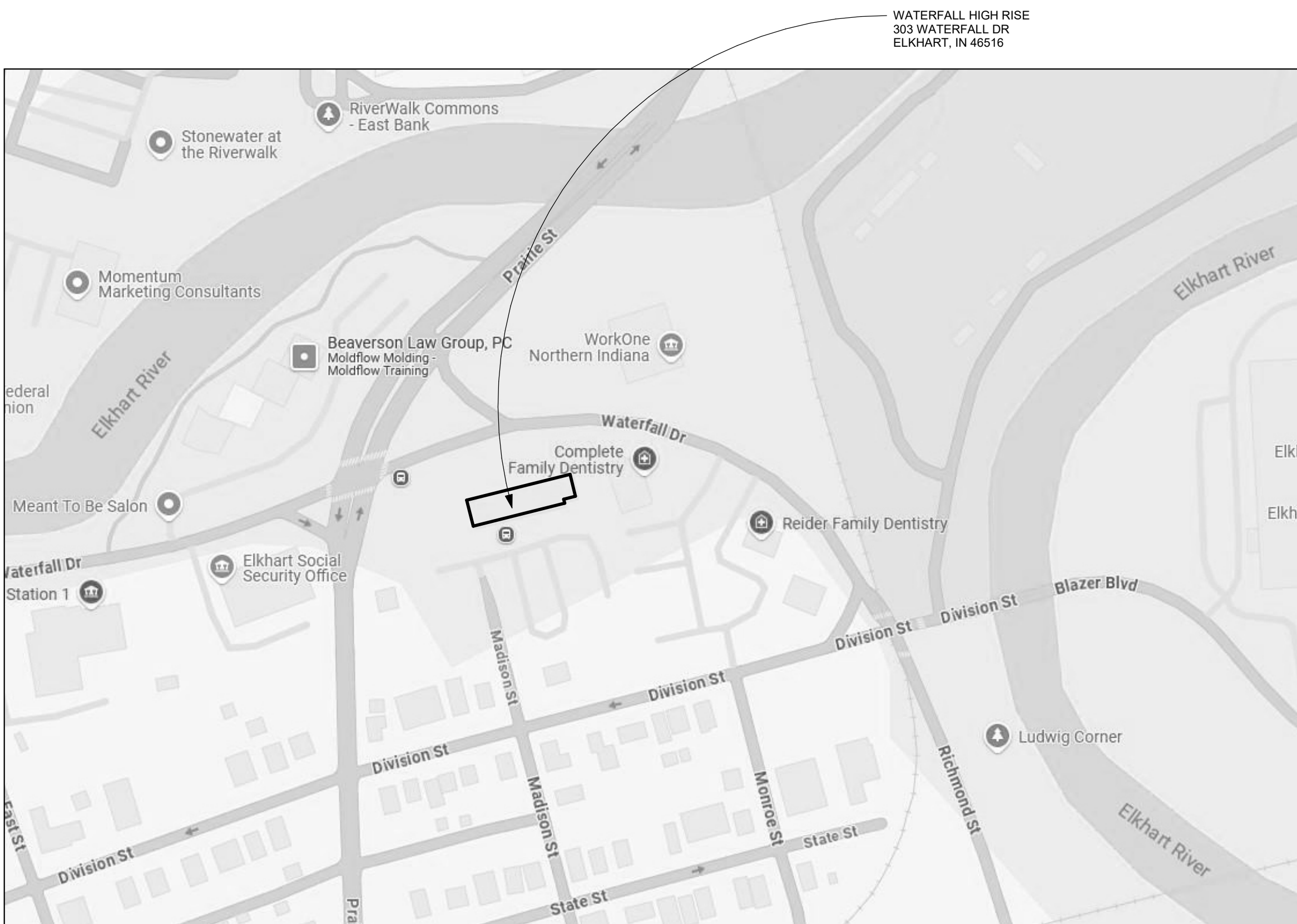
1396 BENHAM AVENUE
ELKHART, INDIANA 46516

OWNER

ELKHART HOUSING AUTHORITY
1396 BENHAM AVE
ELKHART, IN 46516
(574) 295-8392

ARCHITECT

ALLIANCE ARCHITECTS
929 LINCOLNWAY EAST, SUITE 200
SOUTH BEND, IN 46601
(574) 288-2052



INDEX OF DRAWINGS

GENERAL	
G1.0	COVER SHEET
ARCHITECTURAL	
A1.0	DEMOLITION PLAN AND ELEVATIONS
A1.1	GROUND FLOOR PLAN AND ELEVATIONS
A1.2	WALL DETAILS

SCOPE OF WORK

REMOVE AND REPLACE SECTIONS OF EXTERIOR WALLS AND CORRIDOR WALLS AT TWO GROUND LEVEL OFFICES TO IMPROVE SECURITY.

APPLICABLE CODES

2014 INDIANA BUILDING CODE (2012 IBC)
2010 INDIANA ENERGY CONSERVATION CODE, COMMERCIAL (ASHRAE 90.1-2007)
2009 INDIANA ELECTRICAL CODE (NFPA 70-2008)
2014 INDIANA FIRE CODE (2012 IFC)

ENERGY CODE

CLIMATE ZONE:	ELKHART, INDIANA CLIMATE ZONE: 5A		
THERMAL ENVELOPE:	BUILDING COMPONENT	REQUIRED RATING (TABLE 5.5-5)	PROVIDED
	EXTERIOR METAL FRAMED WALLS	R-13 + R-7.5 C.I.	
	DOORS, OPAQUE, SWINGING	U-0.700 MAX.	
	VERTICAL GLAZING, METAL FRAME	U-0.55 MAX.; SHGC-0.40 MAX.	
	AIR LEAKAGE	0.4 CFM/SF MAX.	
EXISTING BUILDING ALTERATIONS (5.4-3.2):			
NFRC CERTIFICATION REQUIRED FOR ALL FENESTRATION PRODUCTS. THE SPACE BETWEEN WINDOW/DOOR JAMBS AND FRAMING, AND SKYLIGHTS AND FRAMING SHALL BE SEALED.			
NO NEW LIGHTING OR MECHANICAL PLANNED.			
ALL INSULATION MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTION.			



PROJECT LOCATION MAP

NOT TO SCALE

ALLIANCE
ARCHITECTS

929 Lincolnway East, Suite 200 | South Bend, Indiana 46601

BID SET

WATERFALL HIGH-RISE SECURITY UPGRADES
ELKHART HOUSING AUTHORITY

303 WATERFALL DR, ELKHART IN 46516

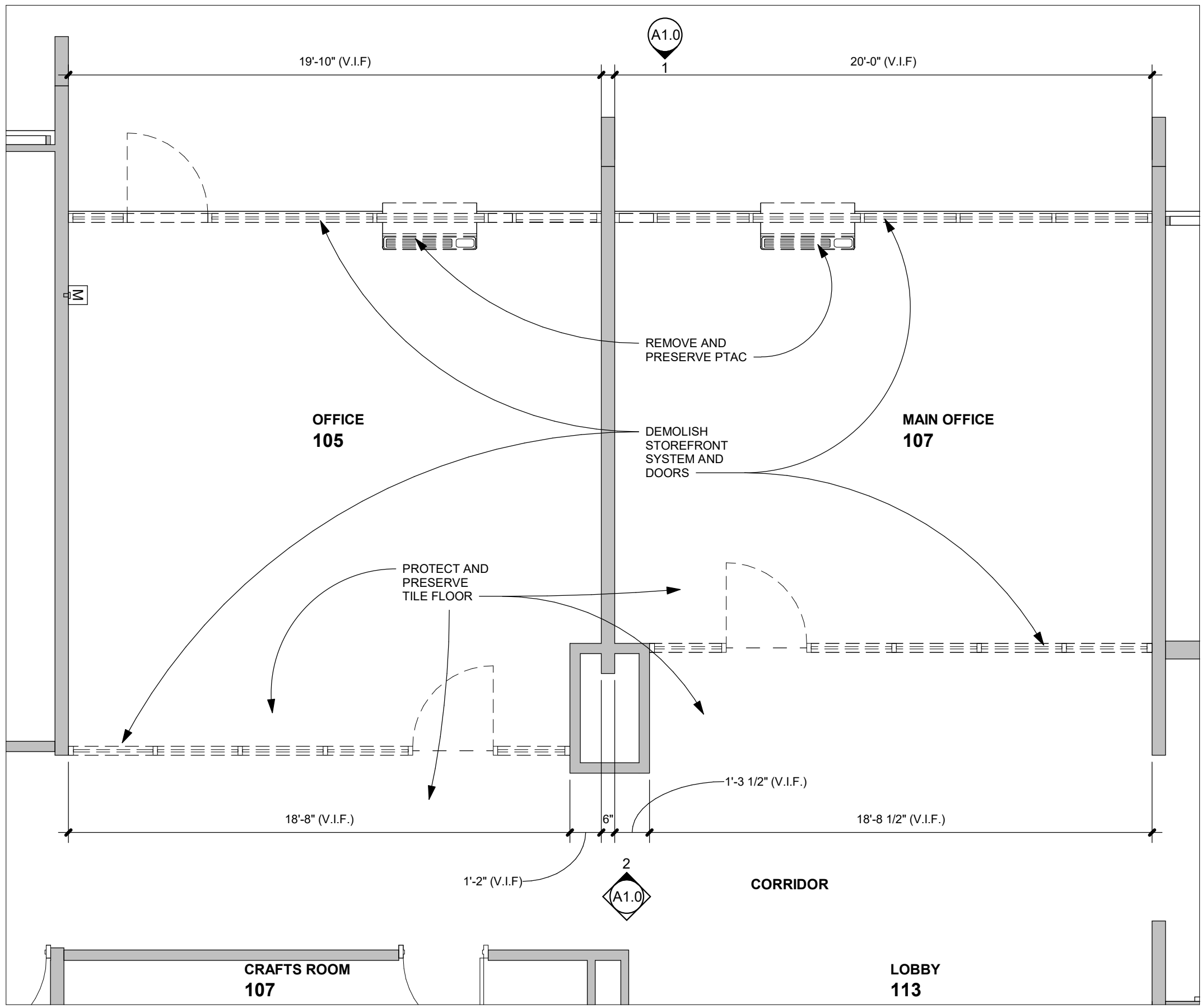
DATE:
05/08/2025

© 2025
ALLIANCE ARCHITECTS
ALL RIGHTS RESERVED

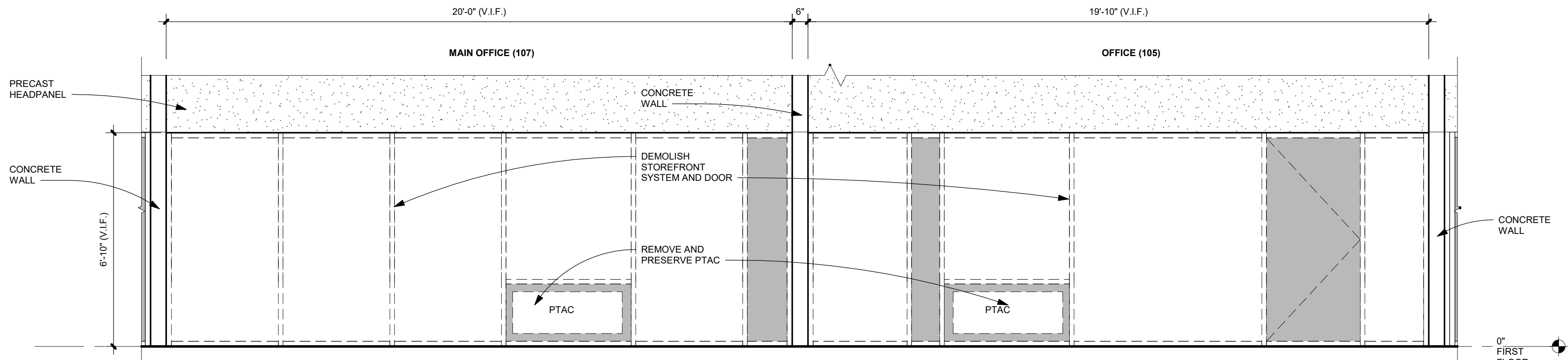
SHEET NO.

G1.0

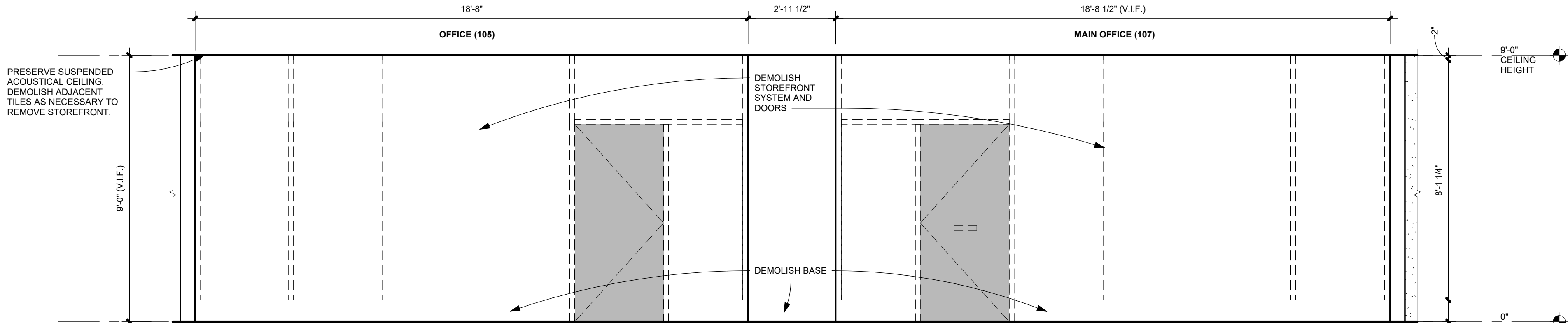
FILE PATH: \\UCA\NFS01\ALL\Proj\Alliance Projects\Elkhart HMT O 07 Waterfall Security Drawings\Revit\Waterfall Security Upgrades.rvt
PLOT DATE: 5/9/2025 4:17:20 PM



PARTIAL GROUND
FLOOR PLAN - DEMOLITION



EXTERIOR
ELEVATION - DEMOLITION



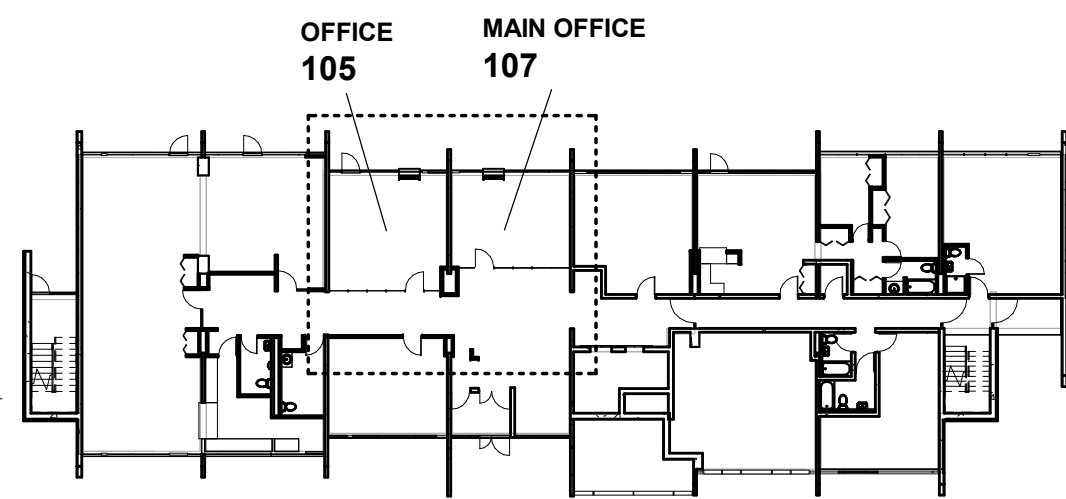
INTERIOR CORRIDOR
ELEVATION - DEMOLITION

WORK SCOPE NOTES

1. REMOVE AND STORE EXISTING PTACS AND SLEEVES FOR RE-USE. VERIFY ALL DIMENSIONS PRIOR TO PROCURING MATERIALS.
2. REMOVE EXISTING INTERIOR AND EXTERIOR STOREFRONT WALL SECTIONS AS INDICATED. TAKE CARE TO PROTECT EXISTING FINISHES TO REMAIN.
3. CUT BACK EXISTING FINISHED FLOORING AND ACOUSTICAL TILE CEILING TO ACCEPT NEW WALL BASE AND TOP PLATE.
4. INSTALL NEW INTERIOR AND EXTERIOR WALLS AS SHOWN. SEE SHEET A1.2 FOR WALL CONSTRUCTION DETAILS.
5. INSTALL NEW DOORS, BORROWED LITES, AND STOREFRONT WINDOWS. SEE DOOR SCHEDULE AND SPECIFICATIONS FOR DOOR AND HARDWARE DETAILS.
6. PAINT NEW WALLS FLOOR TO CEILING, CORNER TO CORNER.
7. REINSTALL EXISTING PTAC UNITS AND SLEEVES IN NEW EXTERIOR WALLS

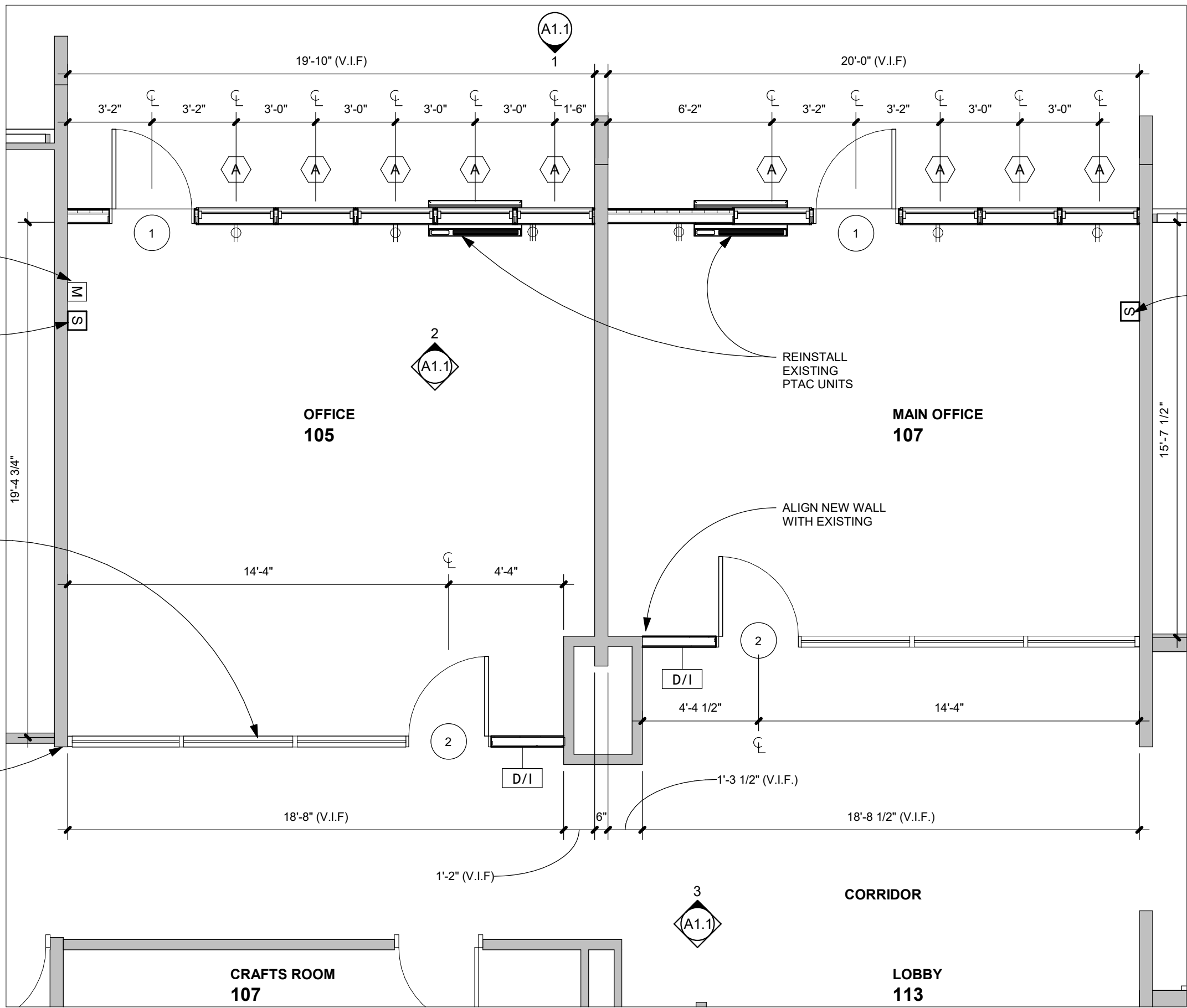
LEGEND

- EXISTING WALL - NO WORK
- EXISTING CONSTRUCTION (DOOR, FIXTURE, ETC.) TO BE REMOVED
- DOOR TAG - SEE DOOR SCHEDULE.
- CENTERLINE
- EXISTING FIRE PULL STATION TO REMAIN
- INSTALL NEW BUZZER/INTERCOM DOOR STATION AIPHONE LE-D OR APPROVED EQUAL
- INSTALL NEW WALL MOUNTED INTERCOM MASTER STATION AIPHONE LEM-1DL OR APPROVED EQUAL - 44" A.F.F. TO BUTTONS



GROUND FLOOR PLAN KEY

FILE PATH: \\C:\AN-F50\ALL\Long\Alliance Projects\Elkhart\HNT.O.07\Waterfall Security Drawings\Revit\Waterfall Security Upgrades.rvt
PLOT DATE: 3/9/2025 4:47:27 PM



PARTIAL GROUND FLOOR PLAN
SCALE: 1/4" = 1'-0"
NORTH

DOOR SCHEDULE										
MARK	DOOR				FRAME		HARDWARE SET		NOTES	
	WIDTH	HEIGHT	THICKNESS	FIRE RATING	TYPE	MATERIAL	TYPE	MATERIAL		
1	3'-0"	6'-8"	1 3/4"	-	F	AL	AL1	AL	1	
2	3'-0"	6'-8"	1 3/4"	45 MIN.	NL	IM	HM1	HM	2	

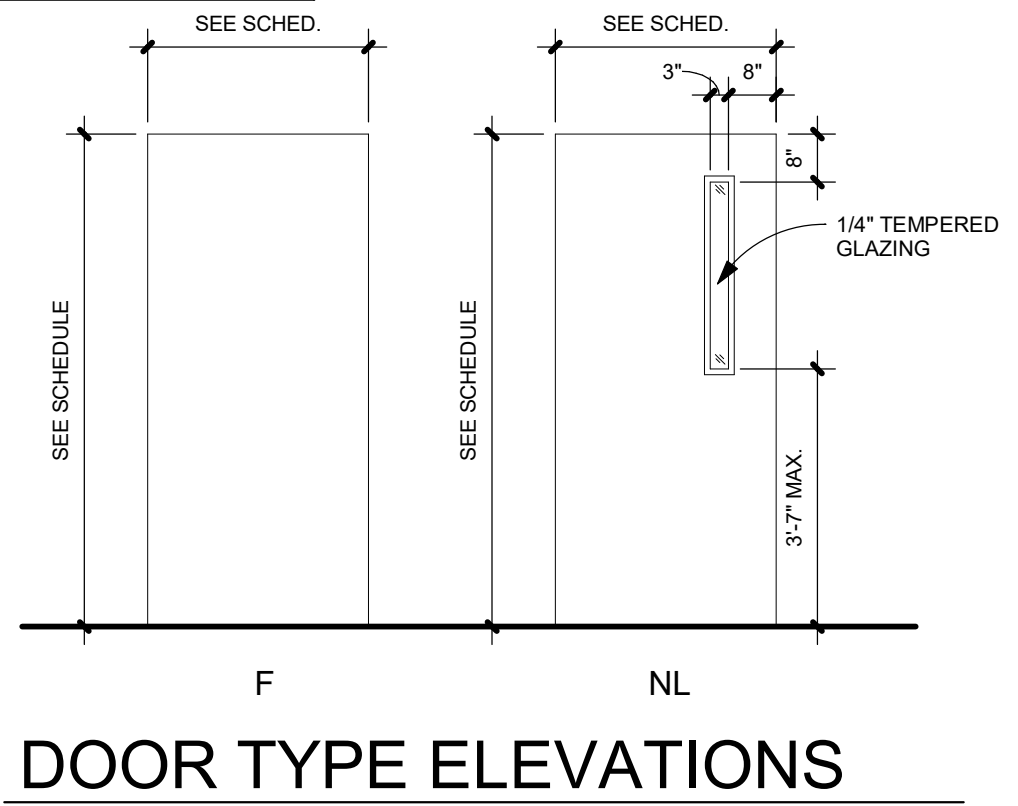
WINDOW SCHEDULE				
MARK	TYPE	WIDTH	HEIGHT	NOTES
A	FIXED	2'-10"	2'-10"	INSTALL 3M SAFETY AND SECURITY WINDOW FILM SAFETY S80 OR APPROVED EQUAL AT ALL GLAZING

DOOR AND FRAME LEGEND

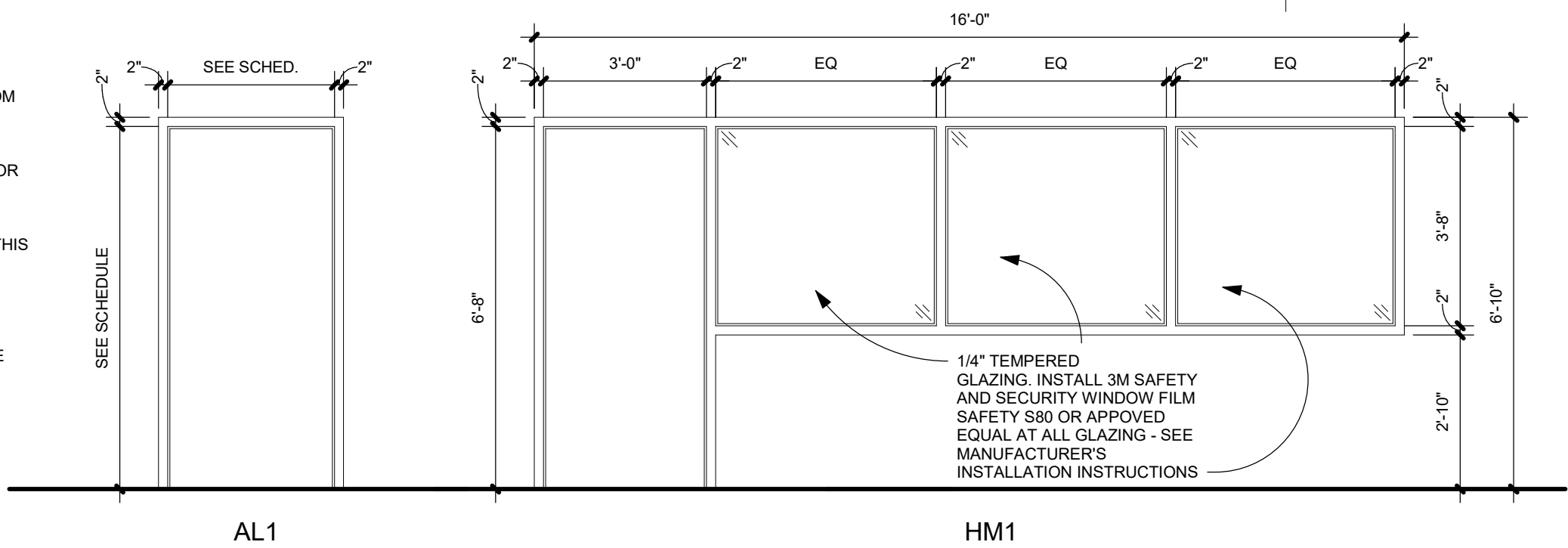
HM	WELDED HOLLOW METAL FRAME - PAINT
F	FLUSH DOOR
NL	NARROW LITE DOOR
AL	INSULATED ALUMINUM DOOR OR FRAME
IM	INSULATED METAL DOOR

DOOR NOTES

- DOOR FRAME AND SIZES ARE NOMINAL. APPROVED SHOP DRAWINGS MUST BE DISTRIBUTED BETWEEN TRADES TO COORDINATE AND VERIFY ACTUAL DOOR AND FRAME SIZES. FIELD VERIFY EXISTING OPENING DIMENSIONS PRIOR TO ORDERING.
- DOOR THICKNESS SHALL BE 1 3/4" (UNLESS NOTED OTHERWISE).
- FOR ELECTRIFIED HARDWARE - SEE DOOR HARDWARE SPECIFICATION SECTION 08 71 00.
- CLOSERS SHALL BE THE LAST HARDWARE ITEMS INSTALLED. VERIFY MAXIMUM DEGREE OF DOOR SWINGS THAT FIELD CONDITIONS WILL ALLOW AND INSTALL CLOSERS ACCORDINGLY - REGARDLESS OF SWINGS SHOWN ON DRAWINGS. REFER TO FLOOR PLAN FOR DIRECTION OF DOOR SWINGS.
- SEE SPECIFICATION SECTION 08 81 00 FOR GLAZING IN DOORS AND LITES.
- SEE SPECIFICATION 08 71 00 FOR DOOR HARDWARE.
- REFER TO THE FLOOR PLAN AND ELEVATIONS FOR BUZZER/INTERCOM DOOR STATION AND INTERCOM MASTER STATION LOCATIONS.
- COORDINATE THE INSTALLATION OF DOOR HARDWARE, DOOR AND MASTER STATION, AND LOW VOLTAGE WIRING INSTALLATION TO DOOR ASSEMBLY IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS IN ORDER TO MAINTAIN SYSTEM WARRANTY.
- SEE DOOR TYPE, DOOR FRAME, AND BORROWED LITE ELEVATIONS THIS SHEET.
- INSTALL NEW BUZZER/INTERCOM DOOR STATION AIPHONE LE-D OR APPROVED EQUAL.
- INSTALL NEW WALL MOUNTED INTERCOM MASTER STATION AIPHONE LEM-1DL OR APPROVED EQUAL - 44" A.F.F. TO BUTTONS



DOOR TYPE ELEVATIONS

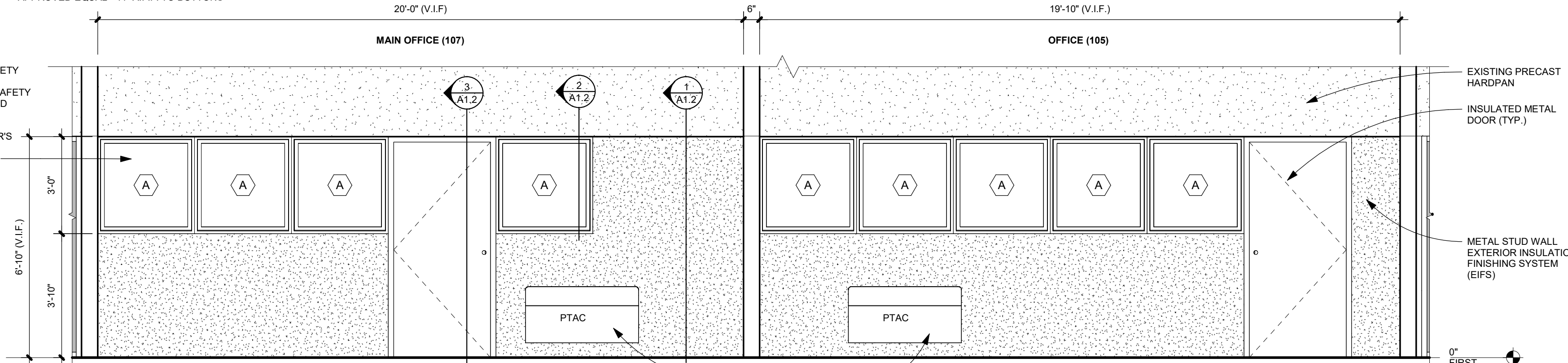


DOOR FRAME AND BORROWED LITE ELEVATIONS

LEGEND

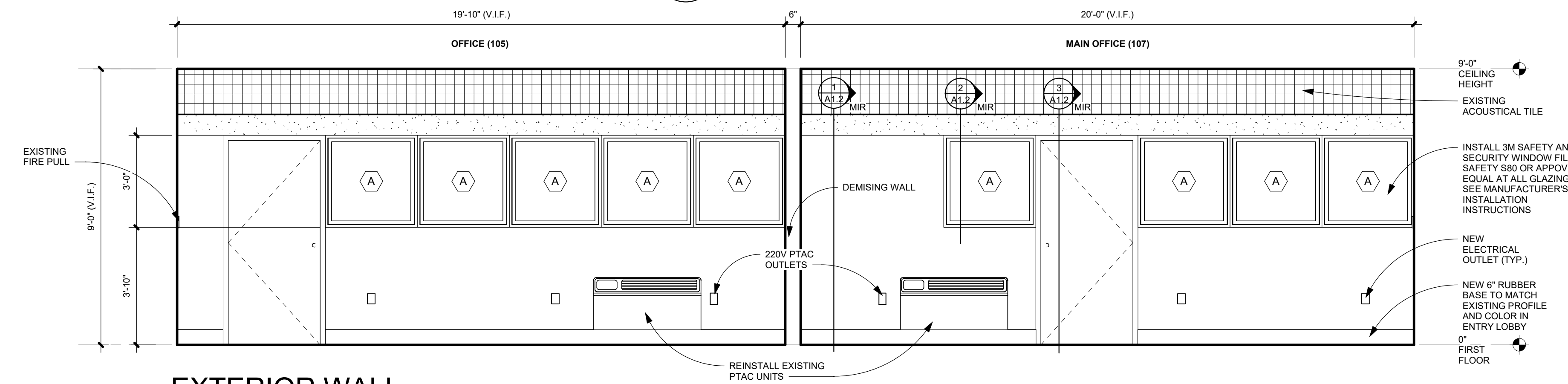
- EXISTING WALL - NO WORK
- EXISTING CONSTRUCTION (DOOR, FIXTURE, ETC.) TO BE REMOVED
- 101 DOOR TAG - SEE DOOR SCHEDULE.
- C CENTERLINE
- M EXISTING FIRE PULL STATION TO REMAIN
- D/I INSTALL NEW BUZZER/INTERCOM DOOR STATION AIPHONE LE-D OR APPROVED EQUAL
- S INSTALL NEW WALL MOUNTED INTERCOM MASTER STATION AIPHONE LEM-1DL OR APPROVED EQUAL - 44" A.F.F. TO BUTTONS

INSTALL 3M SAFETY AND SECURITY WINDOW FILM SAFETY S80 OR APPROVED EQUAL AT ALL GLAZING - SEE MANUFACTURER'S INSTALLATION INSTRUCTIONS



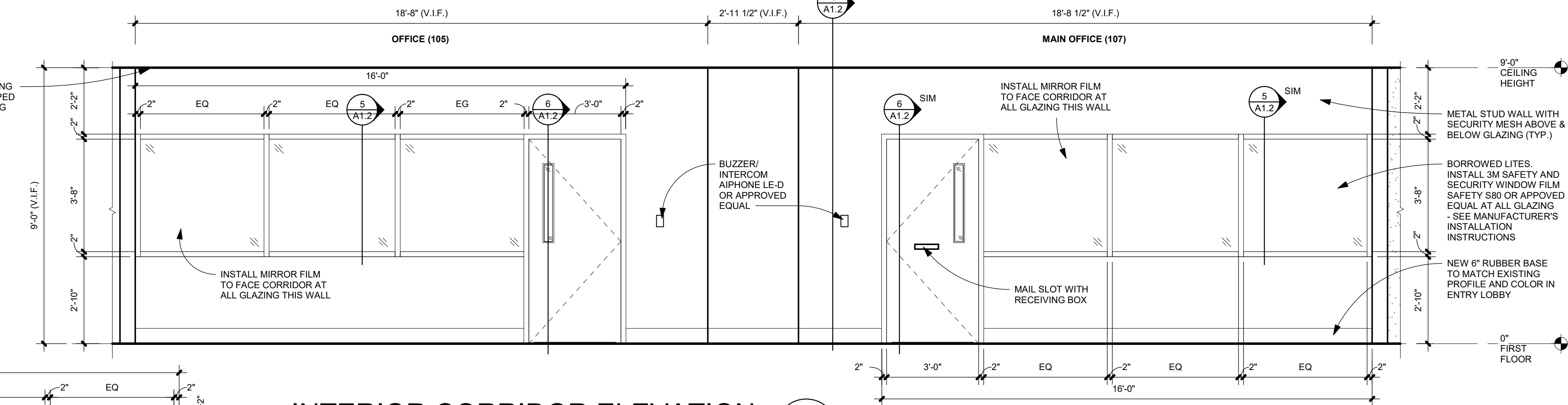
EXTERIOR ELEVATION

SCALE: 3/8" = 1'-0"



EXTERIOR WALL INTERIOR ELEVATION

SCALE: 3/8" = 1'-0"

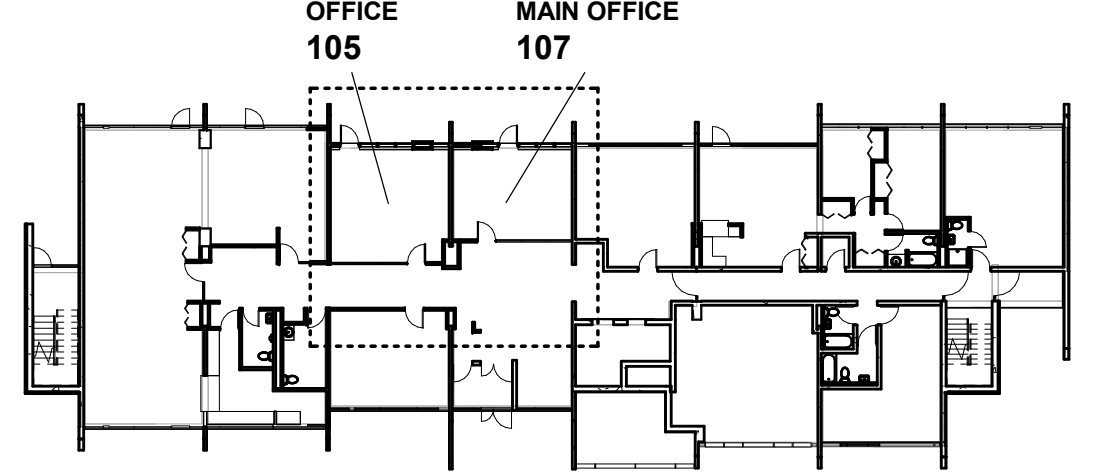
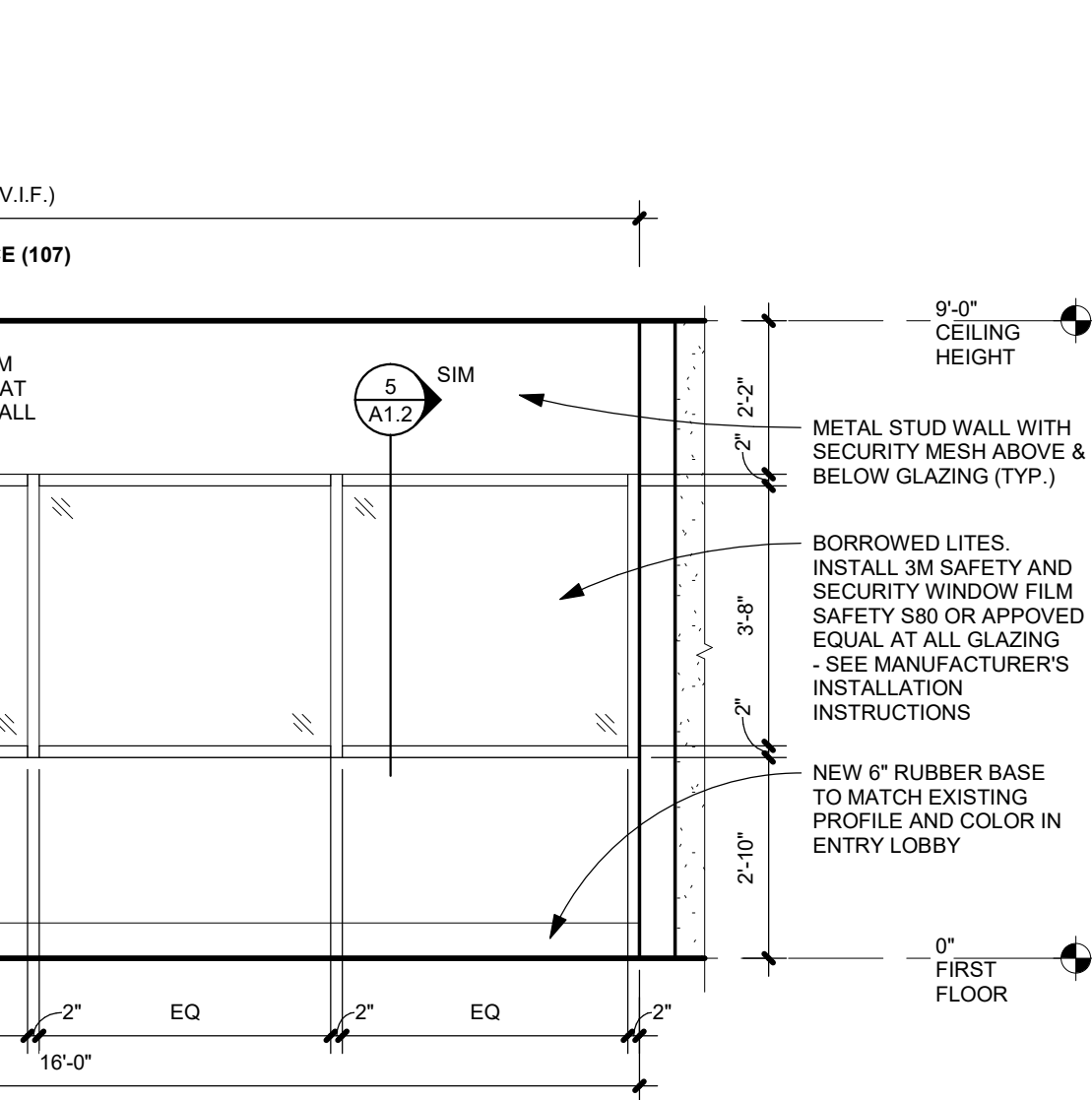
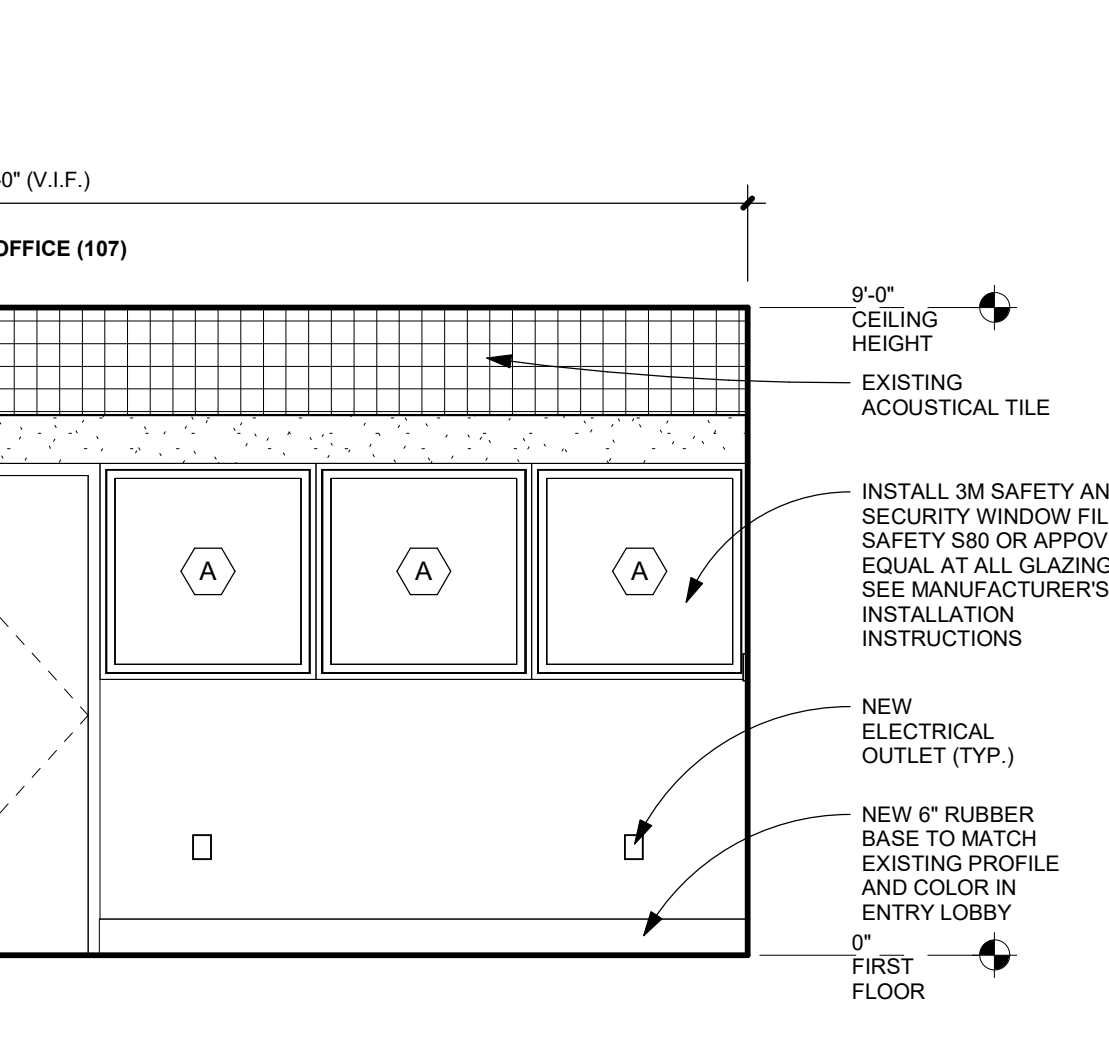
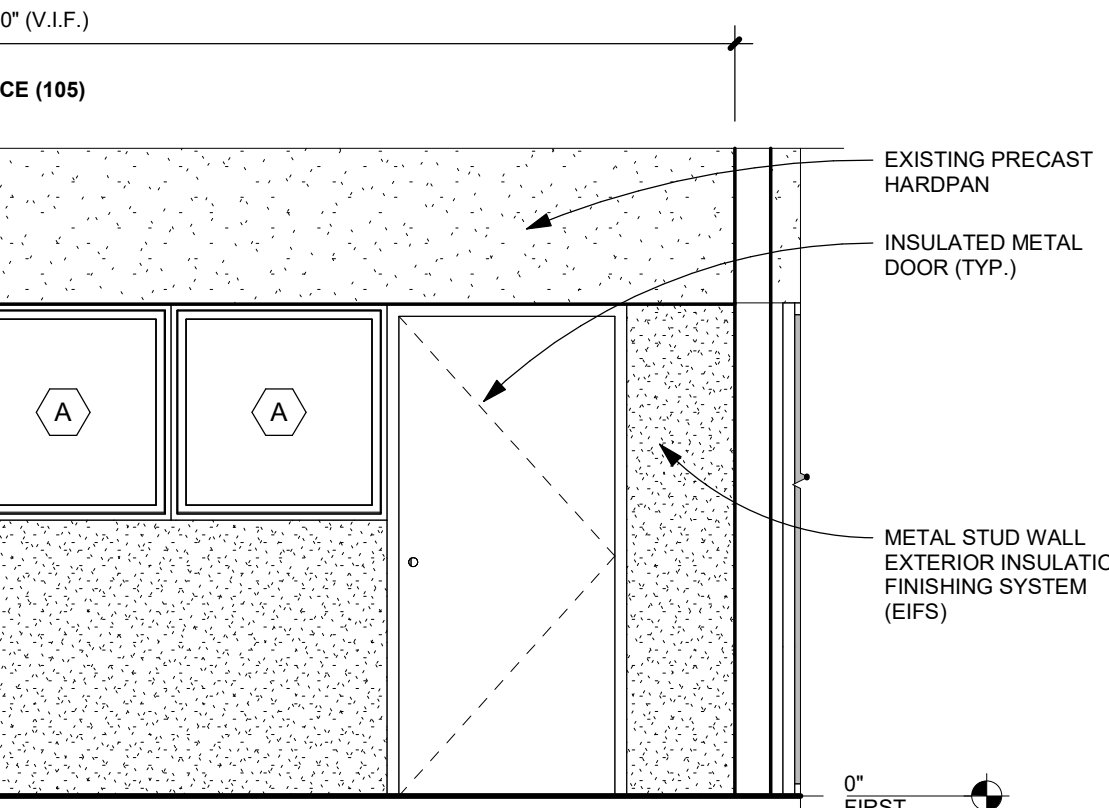


INTERIOR CORRIDOR ELEVATION

SCALE: 3/8" = 1'-0"

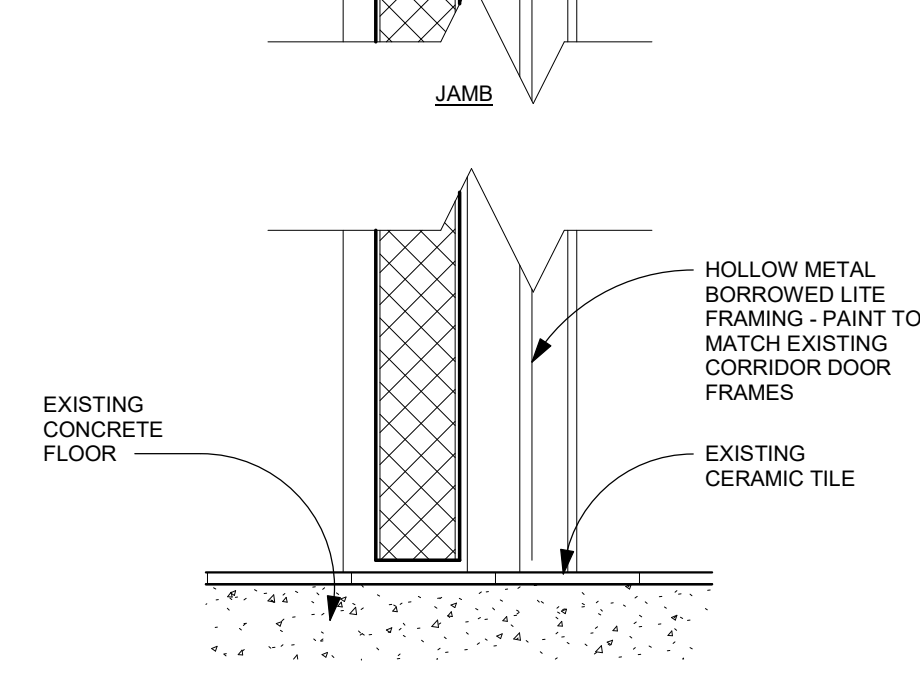
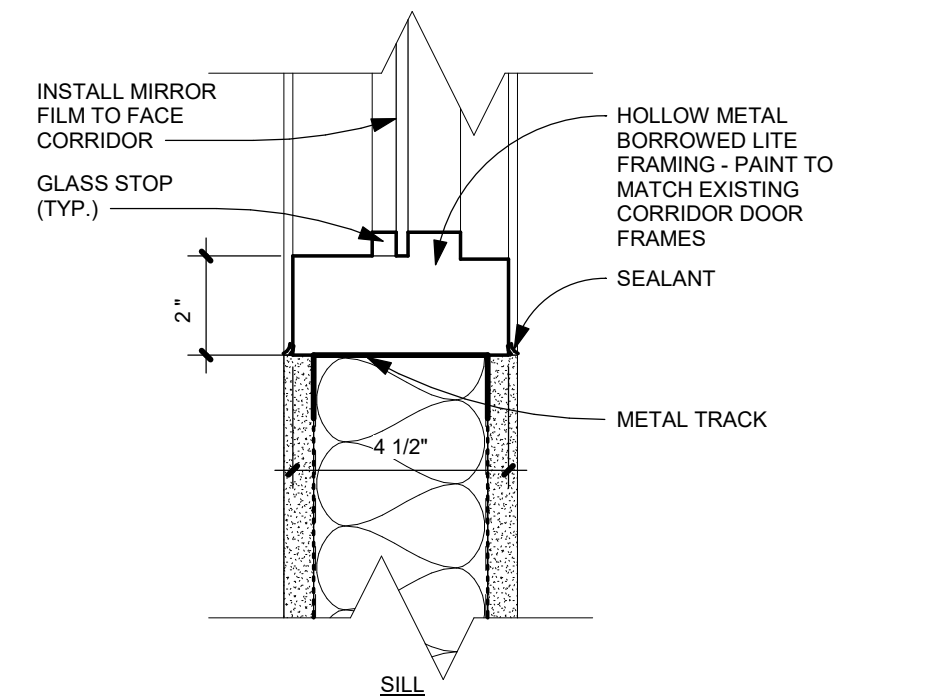
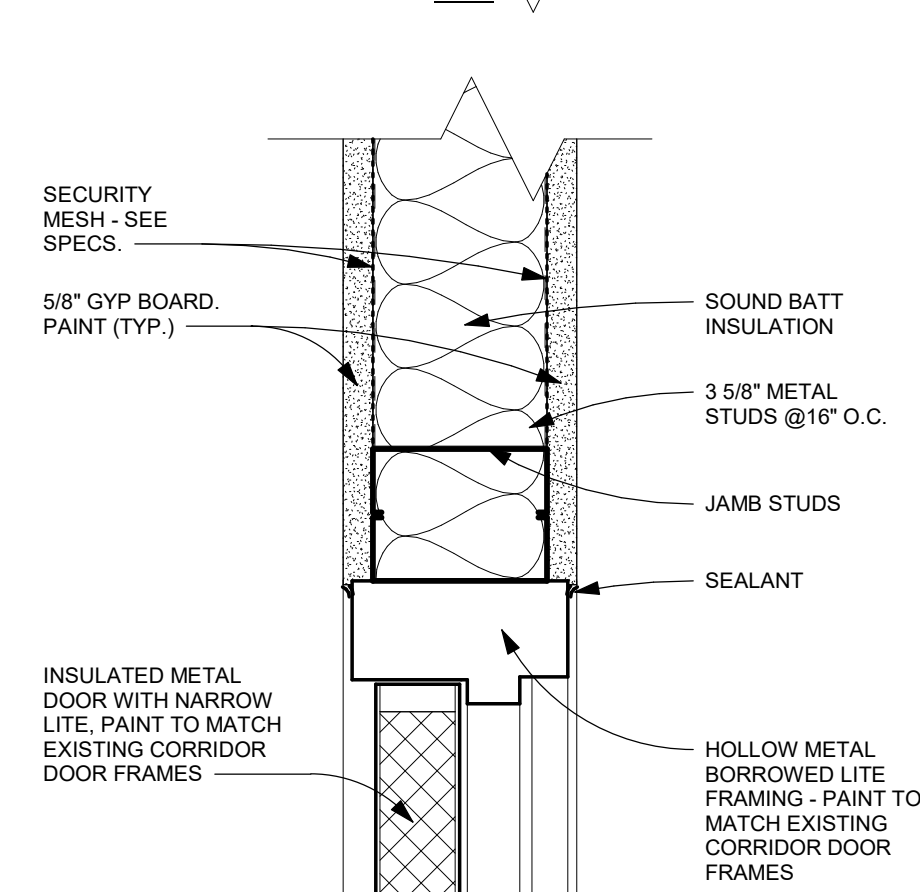
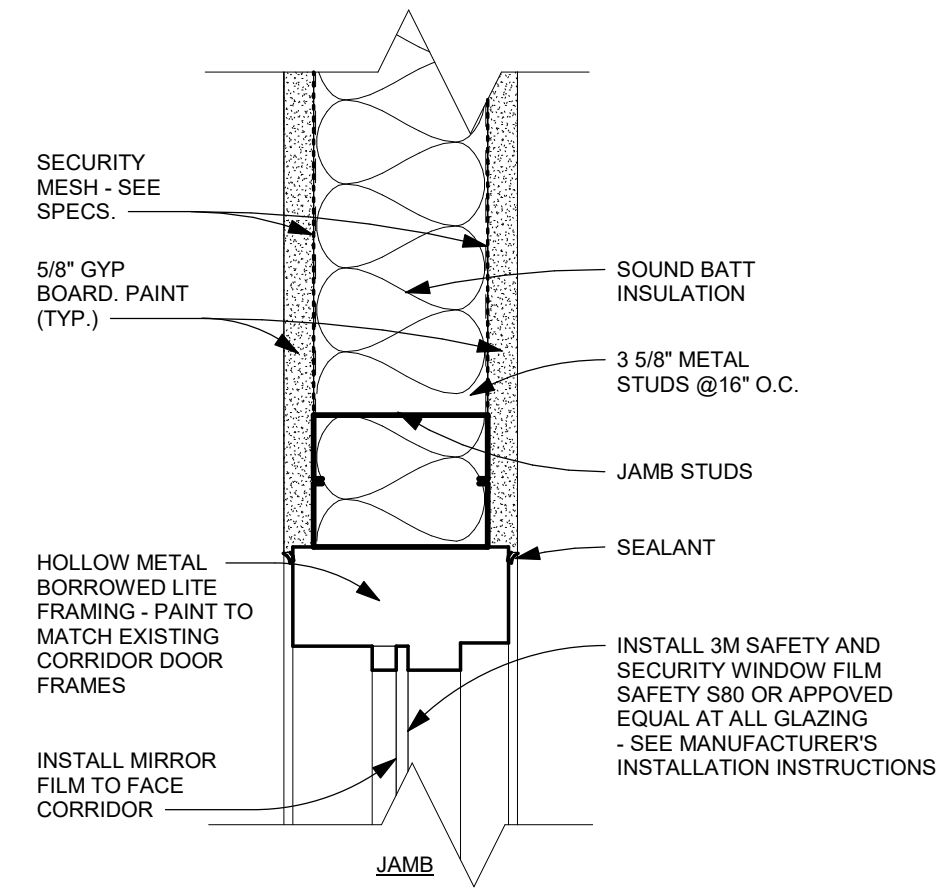
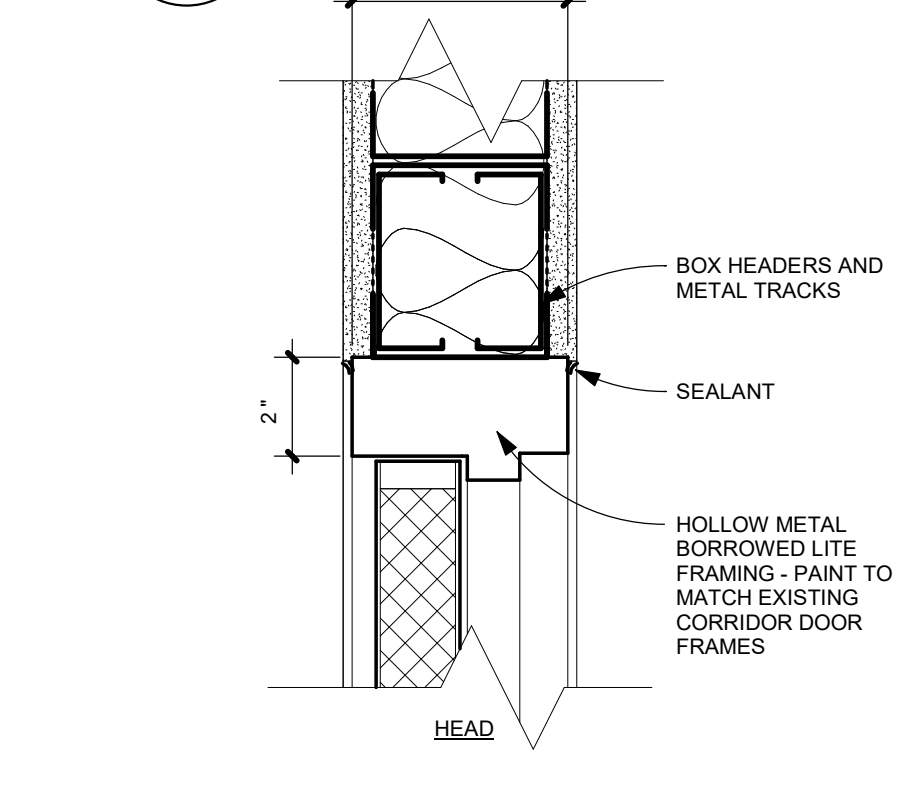
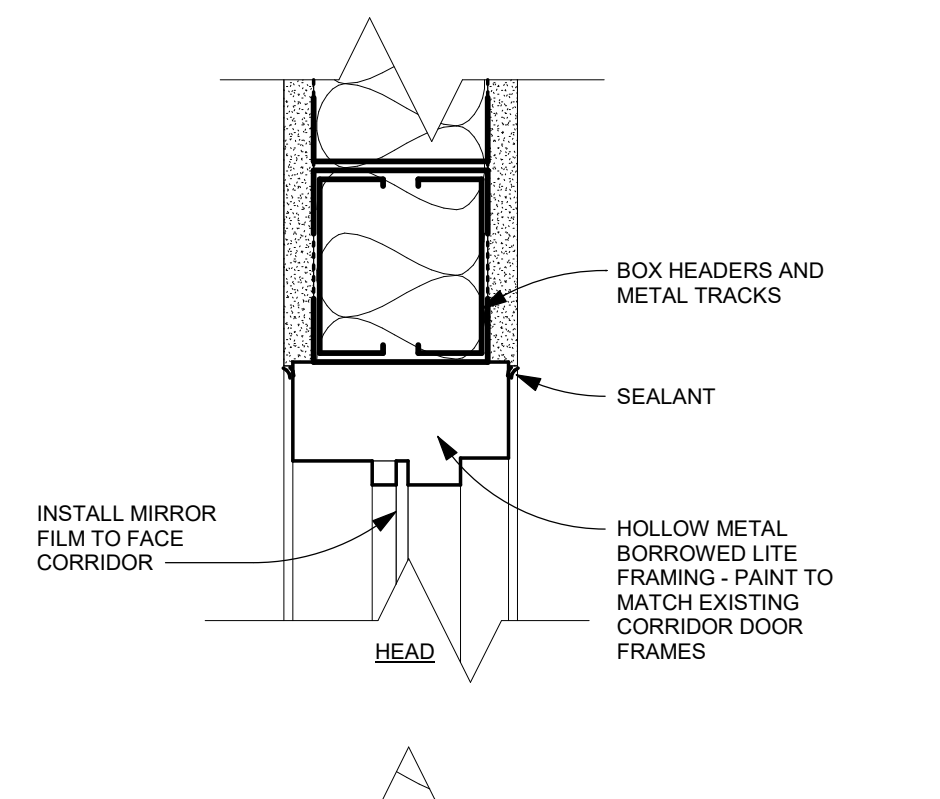
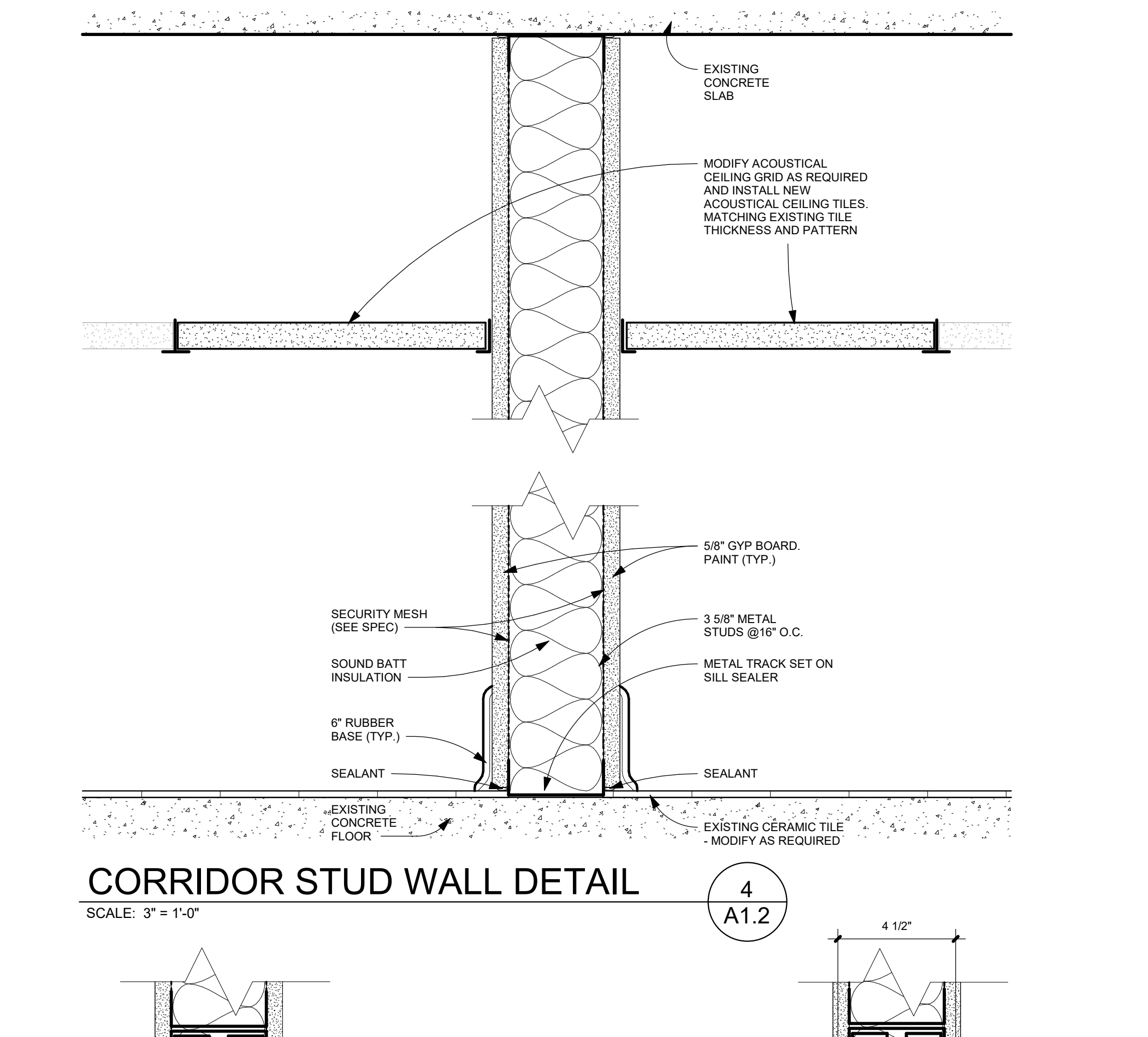
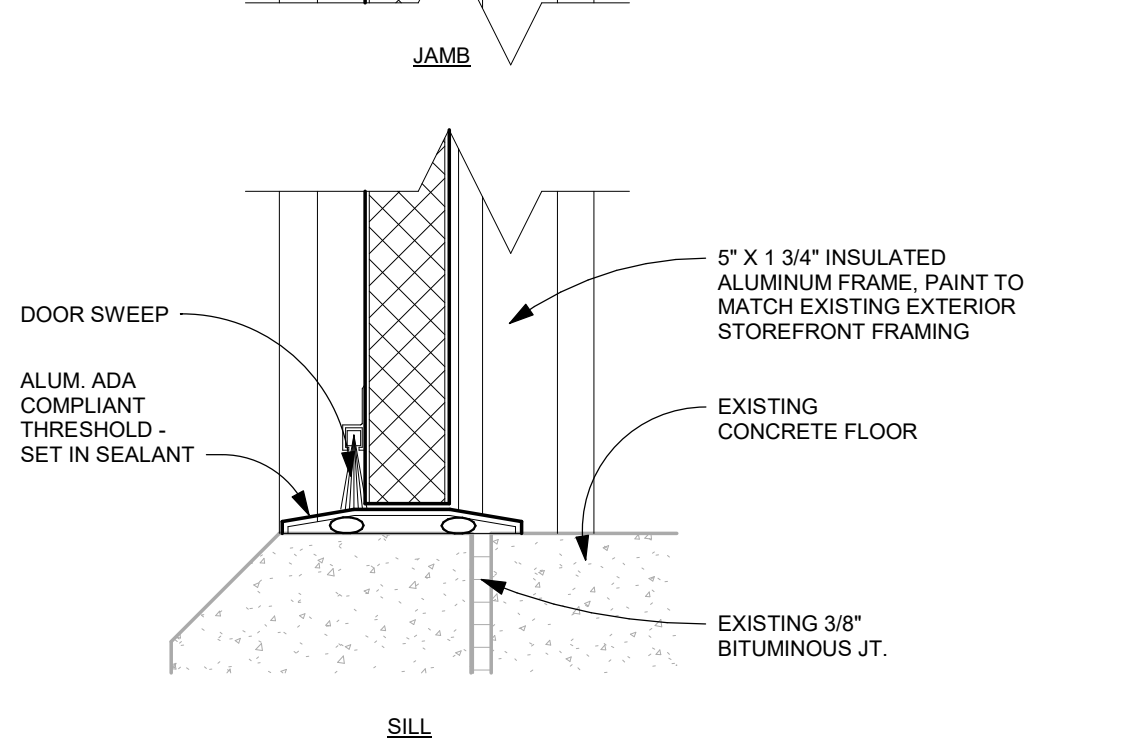
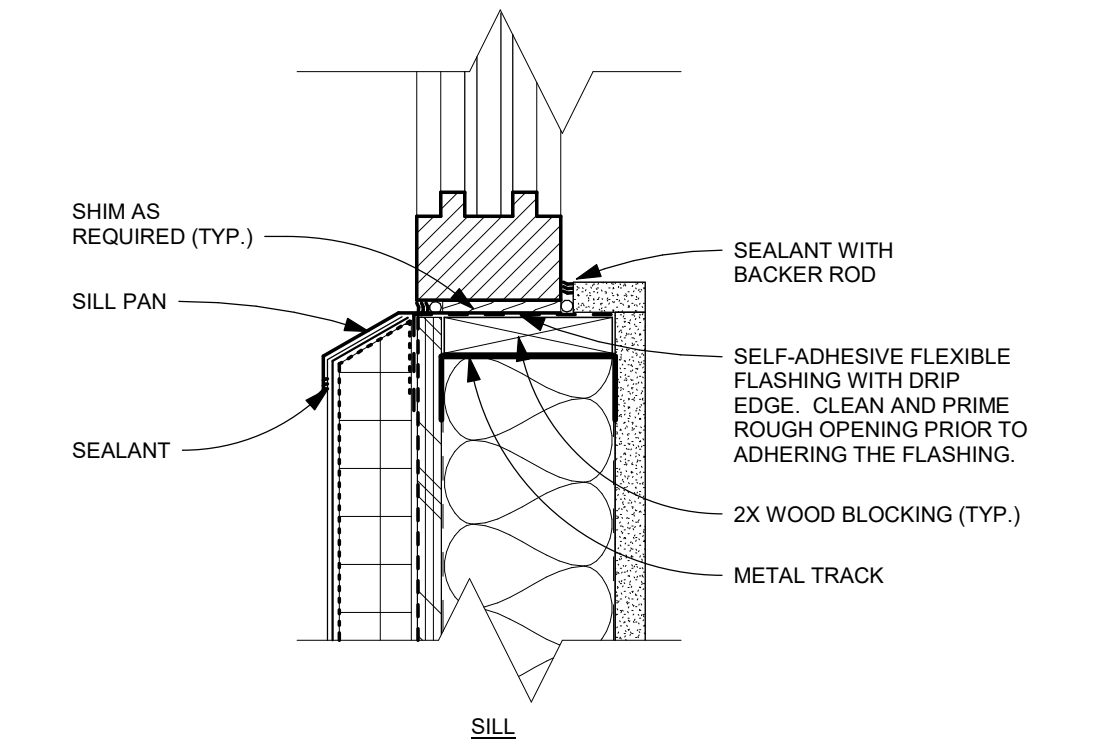
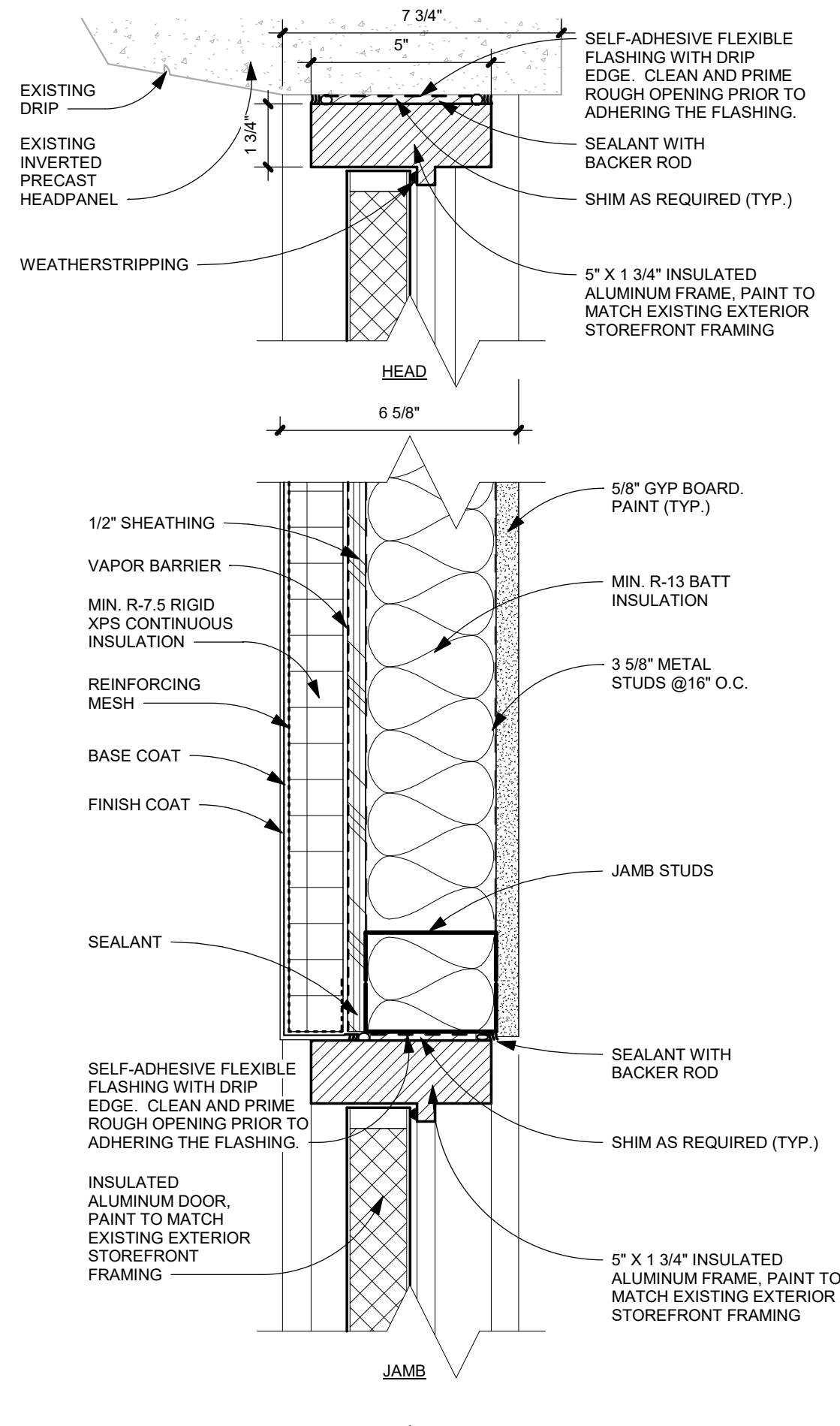
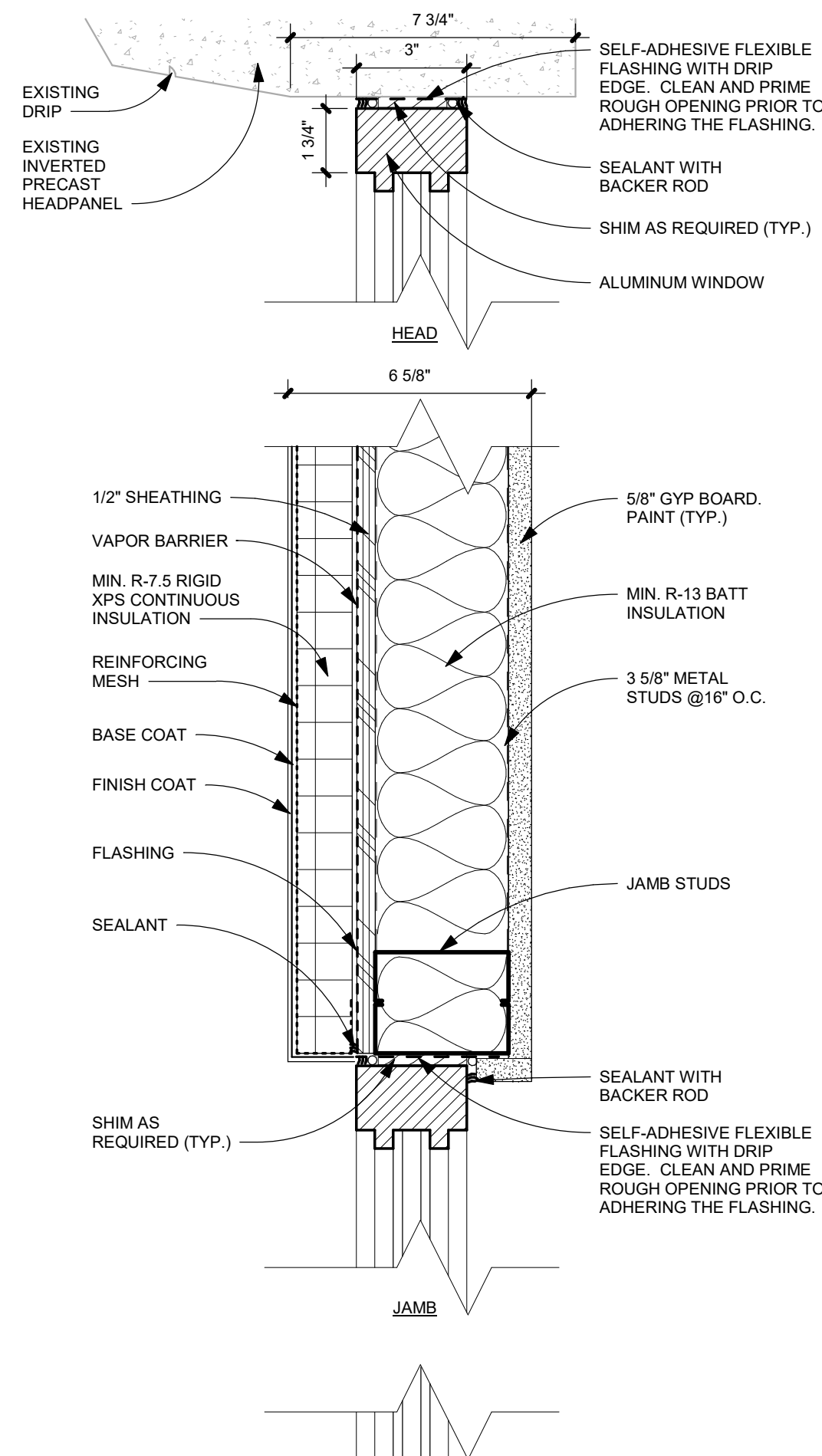
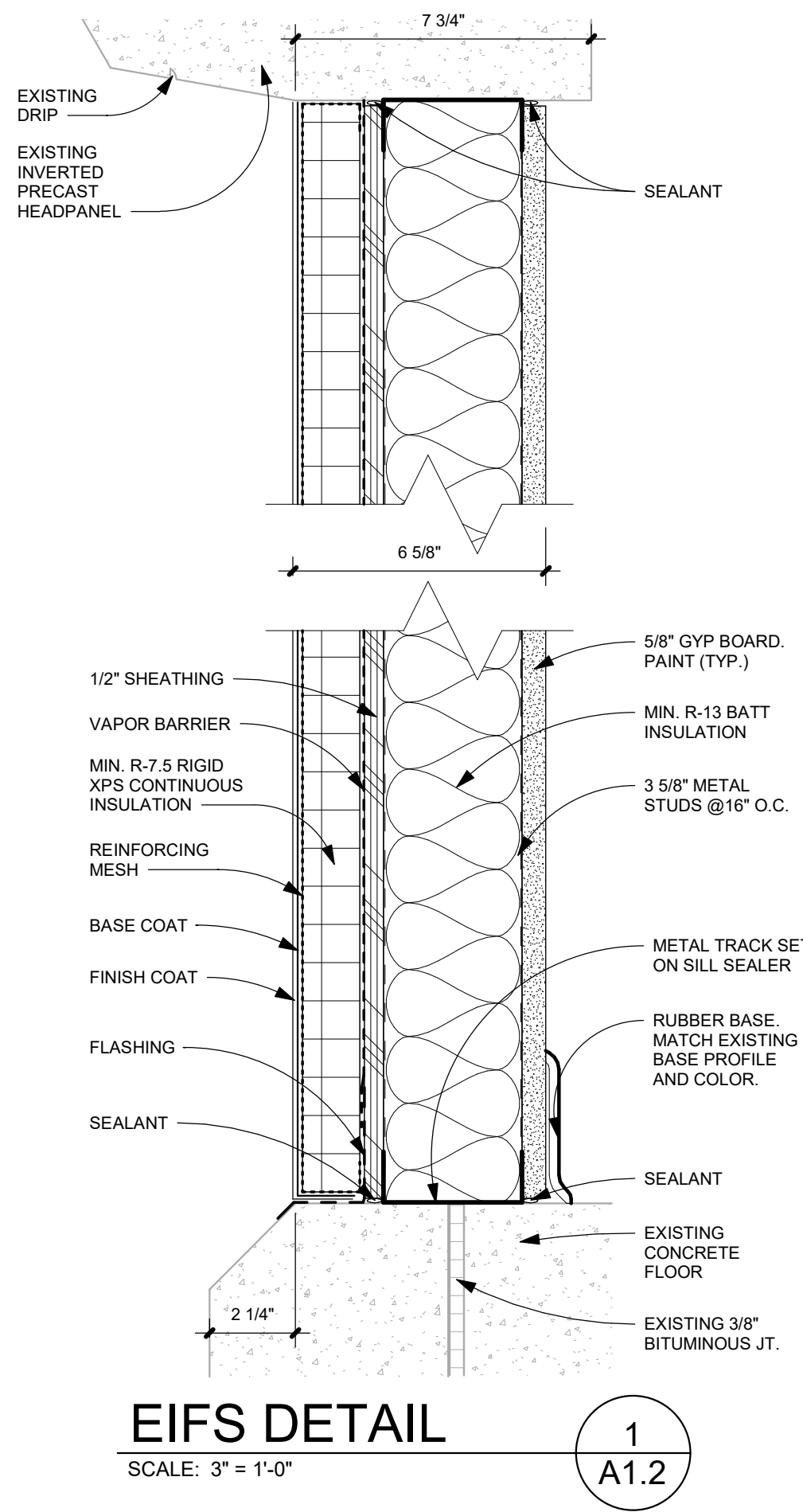
WORK SCOPE NOTES

- REMOVE AND STORE EXISTING PTACS AND SLEEVES FOR RE-USE. VERIFY ALL DIMENSIONS PRIOR TO PROCURING MATERIALS.
- REMOVE EXISTING INTERIOR AND EXTERIOR STOREFRONT WALL SECTIONS AS INDICATED. TAKE CARE TO PROTECT EXISTING FINISHES TO REMAIN.
- CUT BACK EXISTING FINISHED FLOORING AND ACOUSTICAL TILE CEILING TO ACCEPT NEW WALL BASE AND TOP PLATE.
- INSTALL NEW INTERIOR AND EXTERIOR WALLS AS SHOWN. SEE SHEET A1.2 FOR WALL CONSTRUCTION DETAILS.
- INSTALL NEW DOORS, BORROWED LITES, AND STOREFRONT WINDOWS. SEE DOOR SCHEDULE AND SPECIFICATIONS FOR DOOR AND HARDWARE DETAILS.
- PAINT NEW WALLS FLOOR TO CEILING, CORNER TO CORNER.
- REINSTALL EXISTING PTAC UNITS AND SLEEVES IN NEW EXTERIOR WALLS



GROUND FLOOR PLAN KEY

FILE PATH: \\UCA\NFS\01\ALL\Proj\Alliance Projects\Elkhart HMT O 07 Waterfall Security Drawings\Revit\Waterfall Security Upgrades.rvt
PLOT DATE: 5/9/2025 4:47:27 PM



CORRIDOR BORROWED LITE DETAIL
SCALE: 3" = 1'-0"

CORRIDOR DOOR DETAIL
SCALE: 3" = 1'-0"