

Solicitation #: 2022-3021

PROJECT MANUAL

**SAN MARCO
FACADE RESTORATION
1601 MADISON ROAD- CINCINNATI, OH 45206**

OWNED BY



CINCINNATI METROPOLITAN HOUSING AUTHORITY
1627 WESTERN AVENUE - CINCINNATI, OH 45214
GREGORY D. JOHNSON, MS, PHM, EDEP
CHIEF EXECUTIVE OFFICER

ARCHITECT



HUB+WEBER ARCHITECTS, PLC
200 WEST PIKE STREET - COVINGTON, KY 41011
WWW.HUBWEBER.COM

DATE: OCTOBER 2022

Division	Section Title
----------	---------------

DIVISION 00 - PROCUREMENT AND CONTRACTING DOCUMENTS GROUP

BIDDING INSTRUCTIONS:

INVITATION FOR BIDS
INSTRUCTIONS TO BIDDERS (HUD-5369)
CMHA SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

BIDDING DOCUMENTS (The following documents are required for a complete bid):

1. BID FORM
2. BID BOND
3. NON-COLLUSIVE AFFIDAVIT
4. PREVIOUS PARTICIPATION FORM (HUD-2530)
5. DISCLOSURE OF LOBBYING ACTIVITIES
6. REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS (HUD 5369-A)
7. MBE & WBE FORMS:
MINORITY BUSINESS ENTERPRISE (MBE) & WOMEN BUSINESS ENTERPRISE (WBE) – PARTICIPATION
CONTRACTOR'S MBE/WBE PARTICIPATION REPORT FORM
8. SECTION 3 FORMS:
SECTION 3 INTRODUCTION LETTER TO PROSPECTIVE BUSINESS VENDOR
SECTION 3 CONTRACTOR ACTION PLAN SUBMISSION
SECTION 3 HIRING/TRAINING OPPORTUNITY STRATEGIES
SECTION 3 SUBCONTRACTING OPPORTUNITY STRATEGIES
SECTION 3 ASSURANCE OF COMPLIANCE FORM
SECTION 3 CLAUSE

CONDITIONS OF CONTRACT:

GENERAL TERMS AND CONDITIONS (CONSTRUCTION CONTRACT)
CONTRACT SIGNATURE PAGE
BOND FORM
WAGE DETERMINATION

00 31 43 PERMIT APPLICATION

SPECIFICATIONS GROUP

General Requirements Subgroup

DIVISION 01 - GENERAL REQUIREMENTS

- 01 10 00 SUMMARY**
- 01 26 00 CONTRACT MODIFICATION PROCEDURES
01 31 00 PROJECT MANAGEMENT AND COORDINATION
01 32 00 CONSTRUCTION PROGRESS DOCUMENTATION
01 33 00 SUBMITTAL PROCEDURES
01 35 16 ALTERATION PROJECT PROCEDURES
01 40 00 QUALITY REQUIREMENTS
01 42 00 REFERENCES
01 50 00 TEMPORARY FACILITIES AND CONTROLS
01 60 00 PRODUCT REQUIREMENTS
01 73 00 EXECUTION
01 77 00 CLOSEOUT PROCEDURES
01 78 23 MAINTENANCE DATA
01 78 39 PROJECT RECORD DOCUMENTS
01 79 00 DEMONSTRATION AND TRAINING

Facility Construction Subgroup

DIVISION 04 – MASONRY

- 04 01 20 MAINTENANCE OF UNIT MASONRY
04 01 40 STONE REPAIR AND REPOINTING

**INVITATION FOR BID
SOLICITATION NUMBER 2022-3021**

On **November 9, 2022**, at 10:00 a.m., the Cincinnati Metropolitan Housing Authority (CMHA) will receive, open, and read aloud all bids on the project heretofore described as:

Project Name: San Marco – Façade Repair

Contact: All questions concerning this solicitation are to be directed in writing via email at michael.koch@cintimha.com. Responses to questions received prior to 4:00pm (local time) on October 31, 2022 will be posted as an addendum to the CMHA website at <http://www.cintimha.com/business-opportunities.aspx>. It is the responsibility of all bidders to monitor the website and review all addenda posted associated with this bid. Responses for questions received after this date and time will be posted at CMHA's discretion.

Proposals shall be delivered to: Cincinnati Metropolitan Housing Authority
1627 Western Ave
Cincinnati, Ohio 45214

This project is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended. Preference may be given in accordance with 24 CFR 135 and the CMHA procurement policy.

On **October 20, 2022**, bidders may purchase the project manual from **ARC Document Solutions, 7157 Kemper Road Cincinnati, Ohio 45242** for a non-refundable fee (cash, Visa, personal check or money order). The project manual must be ordered in advance from ARC Document Solutions by calling **(513) 326-2300**. For a list of plan holders, go to www.e-arc.com. You may review a set of documents at no charge, at the CMHA, 1627 Western Avenue, Cincinnati, Ohio 45214, Phone: (513) 333-0670 during the hours of 9:00 a.m.- 4:00 p.m., Monday thru Friday or download nonscale copies from the CMHA website <http://www.cintimha.com/business-opportunities.aspx>.

There will be an optional **pre-bid walk through on October 26, 2022 at 11:30 a.m.** Meet at San Marco – 1601 Madison Rd., Cincinnati, OH 45206.

CINCINNATI METROPOLITAN HOUSING AUTHORITY
Gregory D. Johnson, MS, PHM, EDEP, Chief Executive Officer

Advertisement Dates: October 19, 2022 and October 24, 2022.

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

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

Instructions to Bidders for Contracts

Public and Indian Housing Programs

Table of Contents

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

1. Bid Preparation and Submission

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

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

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

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

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

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

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

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

2. Explanations and Interpretations to Prospective Bidders

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

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

3. Amendments to Invitations for Bids

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

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

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

4. Responsibility of Prospective Contractor

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

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

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

5. Late Submissions, Modifications, and Withdrawal of Bids

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

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

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

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

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

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

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

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

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

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

6. Bid Opening

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

7. Service of Protest

(a) Definitions. As used in this provision:

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

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

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

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

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

8. Contract Award

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

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

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

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

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

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

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

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

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

10. Assurance of Completion

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

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

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

[] (3) a 20 percent cash escrow;

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

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

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

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

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

11. Preconstruction Conference (applicable to construction contracts)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

These conditions are a supplement to the HUD 5369 Instructions to Bidders and provide information to help clarify articles of that document. Any articles or paragraphs not specifically mentioned shall remain as printed in HUD 5369 without change.

1. Add to Paragraph 1, subparagraph b:
 - i. The bid documents required for the complete bid package shall consist of the following (all shall be signed originals):
 1. Bid Form
 2. Bid Bond
 3. Non Collusive Affidavit
 4. HUD Form 2530
 5. Disclosure of Lobbying Activities
 6. HUD 5369A
 7. MBE Forms
 8. Section 3 Forms
 9. Contract
 10. Wage Decision Form
2. Add to paragraph 2 subparagraph a
 - a. All questions are to be received in writing. Oral questions will not be accepted. Oral clarifications will not be provided.
 - b. Responses to all written questions will be posted as addendum on the CMHA website at www.cintimha.com.
3. Add to paragraph 4 subparagraph b.1.
 - b.1 Bidders shall indicate receipt of addendum on Bid Form. No other acknowledgement is required.
4. Add to paragraph 4,subparagraph a:
 - a. Ability to demonstrate a minimum of 7 years experience as a general contractor, performing work of like scope and material, for the period immediately preceding commencement of this CMHA Project for work of the size and type of this CMHA Project.

CMHA, in its sole and absolute discretion, will consider a request for a waiver of the 7 year experience requirement, if the contractor can establish that it has successfully undertaken and completed such a number of projects of similar scope and complexity in a lesser number of years so as to confer upon that contractor the same or more experience as other bidders have achieved in 7 or more years of experience.
5. Add to paragraph 5, subparagraph g:
 - g. No bid shall be withdrawn for a time period of ninety (90) calendar days from the bid opening. The foregoing limitation upon withdrawal of bids prior to opening shall be subject to the right of withdrawal of a bid made in error as provided by

Section 9.31, Ohio Revised Code, to the extent that such statutory provision is applicable.

6. Add to paragraph 10, subparagraphs a, b and c:

- a. All bid guarantees to be a minimum of 10% of the bid amount.
- b. All bid bonds be a shall be issued by Surety Companies licensed to issue bonds in the State of Ohio and listed in Federal Register Circular #570. The current power of attorney for the person who signs for any surety company shall be attached to such bid bond.
- c. The CMHA will have the right to retain the bid security of bidders to whom an award is being considered until either (a) the contract has been executed and bonds, if required, have been executed, (b) the specified time has elapsed so that bids may be withdrawn, or (c) all bids have been rejected.

7. Add paragraph 13. Minority Business Enterprise:

It is the goal of CMHA to obtain 20 percent minority business participation on this project.

8. Add paragraph 14. Lead Based Paint:

Any contractor awarded a contract for modernization shall comply with 24 CFR (Code of Federal Regulations) Part 35 prohibiting the use of lead based paint.

9. Add paragraph 15. Sales Tax Exemption:

The contractor shall take whatever steps required by law to relieve the owner from payment of excise tax and Ohio sales tax on materials, specialties and equipment for contractor to take any part of such action shall constitute the responsibility of the contractor to make such tax payments as within the scope of this contract. The owner is tax exempt, and upon request will provide a statement to that effect.

10. Add paragraph 16. Liquidated Damages

This project has liquidated damages, as specified in paragraph 16.1 of the CMHA General Terms and Conditions in this contract, which may be charged against contractors who do not complete work on time.

11. Add paragraph 17. Pre-Bid Conference

A pre-bid conference for all prospective contractors will be held as indicated on the Invitation of Bids. Questions will not be received or answered at the pre-bid conference. All questions are to be submitted in writing and responses will be posted as addendum to the CMHA website at www.cintimha.com.

Before presenting a bid, the contractor is advised to have visited the site and be thoroughly familiar with the scope of work and the conditions under which it will be executed. Failure to do so will not release contractor of his obligation to furnish all material and labor necessary to carry out all provisions of the contract.

12. Add paragraph 18. Definitions

Addenda are written or graphic instruments issued by the CMHA prior to the execution of the Contract, which modify or interpret the Bidding Documents by additions, deletions, clarifications or corrections.

A Bid is a complete and properly signed proposal to do the Work for the sums stipulated therein, submitted in accordance with the Bidding Documents.

The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which Work may be in Alternate Bids.

An Alternate Bid or Alternate is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted. Any alternates accepted by the owner shall be accepted in the order in which they are listed in the form of Bid.

A Unit Price is an amount stated in the Bid as a price per unit of measure for materials, equipment or services or a portion of the Work as described in the Bidding Documents, and to be utilized at CMHA's sole discretion.

13. Add paragraph 19. Form and Style of Bids

- a). Bids shall be submitted on the form included in the Bidding Documents.
- b). All blanks on the Bid Form shall be filled in by typewriter or manually in ink.
- c). Where so indicated by the makeup of the Bid Form, sums shall be expressed in both words and figures, and in case of discrepancy between the two, the amount written in words shall govern.
- d). The signer of the Bid must initial interlineations, alterations and erasures.
- e). All requested Alternates shall be bid. If no change in the Base Bid is required, enter "No Change."
- f). Each copy of the Bid shall include the legal name of the Bidder and a statement that the Bidder is a sole proprietor, partnership, corporation or other legal entity. Each copy shall be signed by the person or persons legally authorized to bind the Bidder to a contract. A Bid by a corporation shall further give the state of incorporation. A Bid submitted by an agent shall have a current power of attorney attached certifying the agent's authority to bind the Bidder.

END OF SECTION

BID FORM

SOLICITATION #: 2022-3021

Façade Repair
San Marco
1601 Madison Rd
CINCINNATI, OH 45206

TO THE CINCINNATI METROPOLITAN HOUSING AUTHORITY (CMHA)

Ladies and/or Gentlemen:

1. In submitting this bid, it is understood that the right is reserved by the Cincinnati Metropolitan 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 within **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 bond and insurance certifications no later than 10 days after the "Notice of Intent".
2. Security in the sum of _____ Dollars
(\$_____) in the form of _____
is submitted herewith in accordance with the Specifications.
3. Attached hereto is an affidavit in proof that the undersigned has not entered into any collusion with any person in respect to this bid or any other bid or the submitting of bids for the contract for which this bid is submitted. Also attached is a completed Form HUD-5369-A, Representations, Certifications, and Other Statements of Bidders.
4. Work under this Contract will begin immediately upon the successful Contractor's receipt of a "Notice to Proceed" from CMHA. "Notice to Proceed" will follow the completion of an executed contract.

5. **ADDENDA**

Bidder acknowledges receipt of the following Addenda:

ADDENDUM NO. _____	DATED _____
ADDENDUM NO. _____	DATED _____
ADDENDUM NO. _____	DATED _____

6. **BASIS OF CONTRACT AWARD**

CMHA intends to award this contract for **Solicitation No. 2022-3021** titled "**San Marco – Façade Repair**", to the responsible bidder submitting the LOWEST "TOTAL BID" complying with these Public Bid Specifications, Drawings and Addenda, if any, provided the Contractor's, bid is reasonable and it is in the best interest of CMHA to accept it. The LOWEST "TOTAL BID" will be the bid reflecting the lowest dollar amount in the "TOTAL BID".

The undersigned having familiarized themselves with the local conditions affecting the cost of the work, and with the Drawings and Specifications, issued and Addenda, if any thereto, as prepared by the Development Division of the Cincinnati Metropolitan Housing Authority,

propose to furnish all labor, materials, equipment, permits and services required to complete the work identified herein at the prices listed below.

7. **CONTRACT TIME**

The contract performance period from the "Notice to Proceed" until substantial completion, will be 90 **calendar days** for the "Total Bid".

8. **BID AMOUNT - TOTAL**

The total Bid Amount is for all work indicated in the Specification, Drawings and Addendums including allowances and attic stock.

TOTAL BID SUM OF (WORDS)

_____ **DOLLARS.**

TOTAL BID SUM OF (FIGURES) \$ _____.

NOTE: The Total Bid Amount shall be shown in both words and figures; in case of discrepancy, the amount in words shall govern. To be valid bid, the bid form must be filled out in its entirety with all certifications and affidavits. It must be submitted with and is part of the Bid Documents.

The penalty for making false statements in any offer is prescribed in 19 U.S.C. 1001.

Date: _____ 2022

Company: _____

Address: _____

By: _____

City, State, Zip _____

Title: _____

Fed. Tax ID: _____

(Signature of Bidder)

NOTE: LATE BIDS WILL NOT BE RECEIVED. THE LOBBY CLOCK ESTABLISHES THE TIME FOR THE BID OPENING.

BID BOND

KNOWN ALL MEN BY THESE PRESENTS, that we:

(Insert full name and address or legal title of Contractor)

as Principal, hereinafter called the Principal, and:

(Insert full name and address or legal title of Surety)

a corporation duly organized under the laws of the State of:

_____ as Surety, hereinafter called the

Surety, are held and firmly bound unto:

(Insert full name and address or legal title of Owner)

hereinafter called the Obligee, in the sum of:

_____ DOLLARS

(In Words)

\$ _____

for payment of which sum, well and truly to be made, we hereby jointly bind ourselves, our heirs, executors, administrators, successors and assigns. The CONDITION OF THIS OBLIGATION IS SUCH, that whereas, the Principal has submitted the accompanying bid, dated:

_____ 20_____ for _____

NOW, THEREFORE, if the Obligee shall accept the Bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such Bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference between the amount specified in said Bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bond, then this obligation shall be null and void, otherwise to remain in full force and effect.

SIGNED SEALED AND DATED THIS _____ DAY OF _____, 20_____

WITNESS

PRINCIPAL

BY_____

SURETY

BY_____

Note: In lieu of such bond, the Bidder shall include with his proposal, a Certified Check, Bank Draft, or U.S. Government Bond at par value, payable to the Obligee.

Certified Check for_____

DOLLARS - ON _____BANK OF _____

_____DEPOSITED HERewith

BIDDER

BY_____

TITLE

NON COLLUSIVE AFFIDAVIT

State of _____)

ss

County of _____)

_____, being first sworn, deposes:

and says that he is _____ of _____
(sole owner, partner, etc.) (Firm Name)

the party making the foregoing proposal or bid, that such proposal or bid is genuine and not collusive or sham; that aspired, connived or agreed, directly or indirectly, with any bidder or person, to put in a sham bid or to refrain from bidding, and has not in any manner, directly, or indirectly, sought by agreement or collusion, or communication or conference, with any person, to fix the bid price of affiant or of any other bidder, or to fix any overhead, profit or cost element of said bid price, to secure any advantage against the Cincinnati Metropolitan Housing Authority or any person interested in the proposed contract; and that all statements in said proposal or bid are true.

Signature of Bidder: _____
(If Individual)

Signature of Bidder: _____
(If Partnership)

Signature of Bidder: _____
(If Corporation)

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

_____, My commission expires _____, 20____
Notary Public

THIS PAGE INTENTIONALLY BLANK

**Previous Participation
Certification**

U.S. Department of Housing
And Urban Development
Office of Housing /Federal Housing Commissioner

U.S. Department of Agriculture
Farmers Home Administration

OMB Approval No. 2502-0118
(exp 11/30/2012)

Part I To be completed by Principals of Multifamily Projects. See Instructions Reason for Submitting Certification			For HUD HQ/FmHA use only	
1. Agency Name and City where the application is filed			2. Project Name, Project Number. City and Zip Code contained in the application	
3. Loan or Contract Amount	4. Number of Units or Beds	5. Section of Act	6. Type of Project (check one) <input type="checkbox"/> Existing <input type="checkbox"/> Rehabilitation <input type="checkbox"/> Proposed (New)	
List of all proposed Principal Participants and attach organization chart for all organizations. 7. Names and addresses of All Known Principals and Affiliates (people, business & organizations) proposing to participate in the project described above. (list names alphabetically; last, first, middle initial)			8. Role of Each Principal in Project	9. Expected % Owner Ship Interest in Project

Certifications: I (meaning the individual who signs as well as the corporations, partnerships or other parties listed above who certify) hereby apply to HUD or USDA FmHA, as the case maybe, for approval to participate as a principal in the role and project listed above based upon my following previous participator record and this Certification. Verify that neither you n any of your principals or affiliates have ever been fou to be in noncompliance with any applicable fair housi and civil rights requirements in 24 CFR 5.105 (a). If you or any of your principals or affiliates have been found to be in noncompliance with any such requirements, attach a signed statement explaining the relevant facts, circumstances, and resolution, if any. I certify that all the statements made by me are true, complete and correct to the best of my knowledge and belief and are made in good faith, including the data contained in Schedule A and Exhibits signed by me ar attached to this form. **Warning:** HUD will prosecute false claims and statements. Conviction may result in criminal and/or civil penalties. I further certify that:

Schedule A contains a listing of every assisted or

insured project of HUD, USDA FmHA and State and local government housing finance agencies in which I have been or am now a principal.
 2. For the period beginning 10 years prior to the date of this certification, and except as shown by me on the certification.
 a. No mortgage on a project listed by me has ever been in default, assigned to the Government or foreclosed, nor has mortgage relief by the mortgagee been given;
 b. I have not experienced defaults or noncompliances under any Conventional Contract or Turnkey Contract of Sale in connection with a public housing project;
 c. To the best of my knowledge, there are no unresolved findings raised as a result of HUD audits, management reviews or other Governmental investigations concerning me or my projects;
 d. There has not been a suspension or termination of payments under any HUD assistance contract in which I have had a legal or beneficial interest;
 e. I have not been convicted of a felony and am not presently, to my knowledge, the subject of

complaint or indictment charging a felony. (A felony is defined as any offense punishable by imprisonment for a term exceeding one year, but does not include any offense classified as a misdemeanor under the laws of a State and punishable by imprisonment of two years or less);
 f. I have not been suspended, debarred or otherwise restricted by any Department or Agency of the Federal Government or of a State Government from doing business with such Department or Agency.
 g. I have not defaulted on an obligation covered by a surety or performance bond and have not been the subject of a claim under an employee fidelity bond.
 3. All the names of the parties, known to me to be principals in this project(s) in which I propose to participate, are listed above.
 4. I am not a HUD/FmHA employee or a member of a HUD/FmHA employee's immediate household as defined in Standards of Ethical Conduct for Employees of the Executive Branch in 5 C.F.R. Part 2635 (57 FR 35006) and HUD's Standard of Conduct in 24 C.F.R. Part _ and USDA's Standard of Conduct in 7 C.F.R. Part _ Subpart B.

5. I am not a principal participant in an assisted or insured project as of this date on which construction has stopped for a period in excess of 20 days or which has been substantially completed for more than 90 days and documents for closing, including final cost certification have not been filed with HUD or FmHA
 6. To my knowledge I have not been found by HUD or FmHA to be in noncompliance with any applicable fair housing and civil rights requirements in 24 CFR 5.10_ (a).
 7. I am not a Member of Congress or a Resident Commissioner nor otherwise prohibited or limited by law from contracting with the Government of the United States of America.
 8. Statements above (if any) to which I cannot certify have been deleted by striking through the words with a pen. I have initialed each deletion (if any) and have attached a true and accurate signed statement (if applicable) to explain the facts and circumstances which I think helps to qualify me as a responsible principal for participation in this project.

Typed or Printed Name of Principal	Signature of Principal	Certification Date (mm/dd/yyyy)	Area Code and Telephone No.
This form was prepared by (Please print name)		Area Code and Telephone No.	

Schedule A: List of Previous Projects and Section 8 Contracts. By my name below is the complete list of my previous projects and my participation history as a principal; in Multifamily Housing programs of HUD/FmHA, State, and Local Housing Finance Agencies. **Note:** Read and follow the instruction sheet carefully. Abbreviate where possible. Make full disclosure. Add extra sheets if you need more space. Double check for accuracy. If you have no previous projects write, by your name, **"No previous participation, First Experience."**

1. List each Principal's Name (list in alphabetical order, last name first)	2. List Previous Projects (give the I.D. number, project name, city location, & government agency involved if other than HUD)	3. List Principals' Role(s) (indicate dates participated, and if fee or identity of interest participant)	4. Status of Loan (current, defaulted, assigned, or foreclosed)	5. Was Project ever in Default, during your participation?			6. Last Mgmt. and/or Physical Inspctn Rating and Date
				Yes	No	If "Yes," explain	

Part II – For HUD Internal Processing Only

Received and checked by me for accuracy and completeness; recommend approval or transferral to Headquarters as checked below:

Date (mm/dd/yyyy)	Telephone Number and Area Code	<input type="checkbox"/> A. No adverse information	<input type="checkbox"/> C. Disclosure or Certification problem
Staff	Processing and Control	<input type="checkbox"/> B. Name match in System	<input type="checkbox"/> D. Other, our memorandum is attached
Supervisor	Director of Housing/Director, Multifamily Division	Approved <input type="checkbox"/> Yes <input type="checkbox"/> No	Date (mm/dd/yyyy)

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

Carefully read these instructions and the applicable regulations. A copy of those regulations published at 24 C.F.R. 200.210 to 200.245 can be obtained from the Multifamily Housing Representative at any HUD Office. Type or print neatly in ink when filling out this form. Mark answers in all blocks of the form. If the form is not filled completely, it will delay approval of your application.

Attach extra sheets as you need them. Be sure to indicate "Continued on Attachments" wherever appropriate. Sign each additional page that you attach if it refers to you or your record. If you have many projects to list (20 or more) and expect to be applying frequently for participation in HUD projects, you should consider filing a Master List. See Master List instructions below under "Instructions for Completing Schedule A."

Carefully read the certification before you sign it. Any questions regarding the form or how to complete it can be answered by your HUD Office Multifamily Housing Representative.

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

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

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

Who Must Sign and File Form HUD-2530:

Form HUD-2530 must be completed and signed by all parties applying to become principal participants in HUD multifamily housing projects, including those who have no previous participation. The form must be signed and filed by all principals and their affiliates who propose participating in the HUD project. Use a separate form for each role in the project unless there is an identity of interest.

Principals include all individuals, joint ventures, partnerships, corporations, trusts, nonprofit organizations, any other public or private entity, that will participate in the proposed project as a sponsor, owner, prime contractor, turnkey developer, managing agent, nursing home administrator or operator, packager, or consultant. Architects and attorneys who have any interest in the project other than an arms length fee arrangement for professional services are also considered principals by HUD.

In the case of partnerships, all general partners regardless of their percentage interest and limited partners having a 25 percent or more interest in the partnership are considered principals. In the case of public or private corporations or governmental entities, principals include the president, vice president, secretary, treasurer and all other executive officers who are directly responsible to the board of directors, or any equivalent governing body, as well as all directors and each stockholder having a 10 percent or more interest in the corporation.

Affiliates are defined as any person or business concern that directly or indirectly controls the policy of a principal or has the power to do so. A holding or parent corporation would be an example of an affiliate if one of its subsidiaries is a principal.

Exception for Corporations – All principals and affiliates must personally sign the certificate except in the following situation. When a corporation is a principal, all of its officers, directors, trustees and stockholders with 10 percent or more of the common (voting) stock need not sign personally if they all have the same record to report. The officer who is authorized to sign for the corporation or agency will list the names and title of those who elect not to sign. However, any person who has a record of participation in HUD projects that is separate from that of his or her organization must report that activity on this form and sign his or her name. The objective is full disclosure.

Exemptions – The names of the following parties do not need to be listed on form HUD-2530: Public Housing Agencies, tenants, owners of less than five condominium or cooperative units and all others whose interests were acquired by inheritance or court order.

Where and When Form HUD-2530 Must Be Filed: The original of this form must be submitted to the HUD Office where your project application will be processed at the same time you file your initial project application. This form must be filed with applications for projects, or when otherwise required in the situations listed below:

- Projects to be financed with mortgages insured under the National Housing Act (FHA).
- Projects to be financed according to Section 202 of the Housing Act of 1959 (Elderly and Handicapped).
- Projects in which 20 percent or more of the units are to receive a subsidy as described in 24 C.F.R. 200.213.
- Purchase of a project subject to a mortgage insured or held by the Secretary of HUD.

Purchase of a Secretary-owned project. Proposed substitution or addition of a principal, or principal participation in a different capacity from that previously approved for the same project.

Proposed acquisition by an existing limited partner of an additional interest in a project resulting in a total interest of 25 percent or more, or proposed acquisition by a corporate stockholder of an additional interest in a project resulting in a total interest of 10 percent or more.

Projects with U.S.D.A., Farmers Home Administration, or with state or local government housing finance agencies that include rental assistance under Section 8 of the Housing Act of 1937. For projects of this type, form HUD-2530 should be filed with the appropriate applications directly to those agencies.

Review of Adverse Determination: If approval of your participation in a HUD project is denied, withheld, or conditionally granted on the basis of your record of previous participation, you will be notified by the HUD Office. You may request reconsideration by the HUD Review Committee. Alternatively, you may request a hearing before a Hearing Officer. Either request must be made in writing within 30 days from your receipt of the notice of determination.

If you do request reconsideration by the Review Committee and the reconsideration results in an adverse determination, you may then request a hearing before a Hearing Officer. The Hearing Officer will issue a report to the Review Committee. You will be notified of the final ruling by certified mail.

Specific Line Instructions:

Reason for submitting this Certification: e.g., refinance, management, change in ownership, transfer of physical assets, etc.

Block 1: Fill in the name of the agency to which you are applying. For example: HUD Office, Farmers Home Administration District office, or the name of a State or local housing finance agency. Below that, fill in the name of the city where the office is located.

Block 2: Fill in the name of the project, such as "Greenwood Apts." If the name has not yet been selected, write "Name unknown." Below that, enter the HUD contract or project identification number, the Farmers Home Administration project number, or the State or local housing finance agency project or contract number. Include **all** project or contract identification numbers that are relevant to the project. Also enter the name of the city in which the project is located, and the ZIP Code of the site location.

Block 3: Fill in the dollar amount requested in the proposed mortgage, or the annual amount of rental assistance requested.

Block 4: Fill in the number of apartment units proposed, such as "40 units." For hospital projects or nursing homes, fill in the number of beds proposed, such as "100 beds."

Block 5: Fill in the section of the Housing Act under which the application is filed.

Block 7: Definitions of all those who are considered principals and affiliates are given above in the section titled "Who Must Sign and File...."

Block 8: Beside the name of each principal, fill in the role that each will perform. The following are possible roles that the principals may perform: Sponsor, Owner, Prime Contractor, Turnkey Developer, Managing Agent, Packager, Consultant, General Partner, Limited Partner (include percentage), Executive Officer, Director, Trustee, Major Stockholder, or Nursing Home Administrator. Beside the name of each affiliate, write the name of the person or firm of affiliation, such as "Affiliate of Smith Construction Co."

Block 9: Fill in the percentage of ownership in the proposed project that each principal is expected to have. Also specify if the participant is a general or limited partner. Beside the name of those parties who will not be owners, write "None."

Block 10: Fill in the Social Security Number or IRS employer number of every party listed, including affiliates.

Instructions for Completing Schedule A:

Be sure that Schedule A is filled-in completely, accurately and the certification is properly dated and signed, because it will serve as a legal record of your previous experience. All Multifamily Housing projects involving HUD/FmHA, and State and local Housing Finance Agencies in which you have previously participated **must** be listed. Applicants are reminded that previous participation pertains to the individual principal within an entity as well as the entity itself. A newly formed company may not have previous participation, but the principals within the company may have had extensive participation and disclosure of that activity is required. To avoid duplication of disclosure, list the project and then the entities or individuals involved in that project. You may use the name or a number code to denote the entity or individual that participated. The number code can then be used in column 3 to denote role.

Column 2 List the project or contract identification of each previous project. **All previous projects must be included or your certification cannot be processed.** Include the name of all projects, the cities in which they are located and the government agency (HUD, USDA-FmHA or State or local housing finance agency) that was involved. At the end of your list of projects, draw a straight line across the page to separate your record of projects from that of others signing this form who have a different record to report.

The Department of Housing and Urban Development (HUD) is authorized to collect this information by law (42 U.S.C. 3535(d) and 24 C.F.R. 200.217) and by regulation at 24 CFR 200.210. This information is needed so that principals applying to participate in multifamily programs can become HUD-approved participants. The information you provide will enable HUD to evaluate your record with respect to established standards of performance, responsibility and eligibility. Without prior approval, a principal may not participate in a proposed or existing multifamily project. HUD uses this information to evaluate whether or not principals pose an unsatisfactory underwriting risk. The information is used to evaluate the potential principals and approve only individuals and organizations who will honor their legal, financial and contractual obligations.

Privacy Act Statement: The Housing and Community Development Act of 1987, 42 U.S.C. 3543 requires persons applying for a Federally-insured or guaranteed loan to furnish his/her Social Security Number (SSN). HUD must have your SSN for identification of your records. HUD may use your SSN for automated processing of your records and to make requests for information about you and your previous records with other public agencies and private sector sources. HUD may disclose certain information to Federal, State and local agencies when relevant to civil, criminal, or regulatory investigations and prosecutions. It will not be otherwise disclosed or released outside of HUD, except as required and permitted by law. You must provide all of the information requested in this application, including your SSN.

Public reporting burden for this collection of information is estimated to average 1 hour 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. 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.

A response is mandatory. Failure to provide any of the information will result in your disapproval for participation in this HUD program.

Column 3 List the role(s) of your participation, dates participated, and if fee or identity of interest with owners.

Column 4 Indicate the current status of the loan. Except for current loans, the date associated with the status is required. Loans under a workout arrangement are considered assigned. An explanation of the circumstances surrounding the status is required for all non-current loans.

Column 5 Explain any project defaults during your participation.

Column 6 Enter the latest Management and/or Physical Inspection Review rating. If either of the ratings are below average, the report issued by HUD is required to be submitted along with the applicant's explanation of the circumstances surrounding the rating.

No Previous Record: Even if you have never participated in a HUD project before, you must complete form HUD-2530. If you have no record of previous projects to list, fill in your name in column 1 of Schedule A, and write across the form by your name – "No previous participation, first experience."

Master List System: If you expect to file this form frequently and you have a long list of previous projects to report on Schedule A, you should consider filing a Master List. By doing so, you will avoid having to list all your previous projects each time you file a new application.

To make a Master List, use form HUD-2530. On page 1, in block 1, enter (in capital letters) the words "Master List." In blocks 2 through 6 enter in "N.A." meaning Not Applicable. Complete blocks 7 through 10.

In the box below the statement of certification, fill in the names of all parties who wish to file a Master List together (type or print neatly). Beside each name, every party must sign the form. In the box titled "Proposed Role," fill in "N.A." Also, fill in the date you sign the form

and provide a telephone number where you can be reached during the day. No determinations will be made on these certificates.

File one copy of the Master List with each HUD Office where you do business and mail one copy to the following address:

**HUD-2530 Master List
Participation and Compliance
Division – Housing
U.S. Department of Housing and
Urban Development 451 Seventh
Street, S.W. Washington, D.C. 20410**

Once you have filed a Master List, you do not need to complete Schedule A when you submit form HUD-2530. Instead, write the name of the participant in column 1 of Schedule A and beside that write "See Master List on file." Also give the date that appears on the Master List that you submitted. Below that, report all changes and additions that have occurred since that date. Be sure to include any mortgage defaults, assignments or foreclosures not listed previously.

If you have withdrawn from a project since the date the Master List was filed, be sure to name the project. Give the project identification number, the month and year your participation began and/or ended.

Certification:

After you have completed all other parts of form HUD-2530, including Schedule A, read the Certification carefully. In the box below the statement of certification, fill in the name of all principals and affiliates (type or print neatly). Beside the name of each principal and affiliate, each party must sign the form, with the exception in some cases of individuals associated with a corporation (see "Exception for Corporations" in the section of the instructions titled "Who Must Sign and File form

HUD-2530"). Beside each signature, fill in the role of each party (the same as shown in block 8). In addition, each person who signs the form should fill in the date that he or she signs, as well as providing a telephone number where he or she can be reached during business hours. By providing a telephone number where you can be reached, you will help to prevent any possible delay caused by mailing and processing time in the event HUD has any questions.

If you cannot certify and sign the certification as it is printed because some statements do not correctly describe your record, use a pen and strike through those parts that differ with your record, then sign and certify to that remaining part which does describe you or your record.

Attach a signed letter, note or an explanation of the items you have struck out on the certification and report the facts of your correct record. Item A(2)(e) relates to felony convictions within the past 10 years. If you have been convicted of a felony within 10 years, strike out all of A(2)(e) on the certificate and attach your statement giving your explanation. A felony conviction will not necessarily cause your participation to be disapproved unless there is a criminal record or other evidence that your previous conduct or method of doing business has been such that your participation in the project would make it an unacceptable risk from the underwriting standpoint of an insurer, lender or governmental agency.

DISCLOSURE OF LOBBYING ACTIVITIES

Certification for Contracts, Grants, Loans and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with 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, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than 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 in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Executed this _____ date of _____, 20_____.

By _____
(signature)

(type or print name)

(title, if any)

Covered Action: _____
(type and identify program, project or activity)

THIS PAGE INTENTIONALLY BLANK

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

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

Representations, Certifications, and Other Statements of Bidders

Public and Indian Housing Programs

Table of Contents

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

1. Certificate of Independent Price Determination

(a) The bidder certifies that--

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

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

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

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

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

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

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

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

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

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

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

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

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

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

2. Contingent Fee Representation and Agreement

(a) Definitions. As used in this provision:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

4. Organizational Conflicts of Interest Certification

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

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

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

5. Bidder's Certification of Eligibility

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

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

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

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

6. Minimum Bid Acceptance Period

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

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

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

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

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

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

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

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

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

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

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

(Check the block applicable to you)

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

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

The bidder represents and certifies that it:

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

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

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

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

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

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

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

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

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

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

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

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

(1) Obtain identical certifications from the proposed subcontractors;

(2) Retain the certifications in its files; and

(3) Forward the following notice to the proposed subcontractors (except if the proposed subcontractors have submitted identical certifications for specific time periods):

Notice to Prospective Subcontractors of Requirement for Certifications of Nonsegregated Facilities

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

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

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

The bidder certifies that:

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

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

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

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

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

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

13. Bidder's Signature

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

(Signature and Date)

(Typed or Printed Name)

(Title)

(Company Name)

(Company Address)



**Minority Business Enterprise (MBE)
&
Women Business Enterprise (WBE)
Participation**

Contract/P0#: _____ Project Description: _____

The contractor agrees to make its best effort to expend at least 20% of the total dollar amount of the Contract on Minority Business Enterprises (MBE), an entity with at least 51% ownership interest by a minority in business), and at least 5% of the Contract to a Women Business Enterprises (WBE), an entity with a least 51% ownership interest by a woman in business. Any questions regarding CMHA's MBE/WBE Program should be directed to Jacquetta Brown at 513-977-5683 or to Section3@cintimha.com.

Using Best Efforts to Achieve MBE/WBE Goals: Prior to award of Contract, the Contractor will submit documents in support of its best efforts to achieve the above stated MBE/WBE participation. Best efforts may be established by documenting that the Contractor:

- Has made efforts to identify appropriate MBE/WBE contractors through community contacts or MBE and WBE associations
- Has contacted CMHA's Economic Inclusion Coordinator to help identify potential MBE/WBE companies appropriate for the project
- Has contacted and solicited bids/quotes from selected MBE/WBE companies

Notification of MBE/WBE Participation: Contractors agrees to promptly complete and return all required reports confirming MBE/WBE participation, including Proposed, Amended, and Final MBE/WBE Participation Forms. If requested by CMHA, Contractor agrees to submit proof of payment made to each MBE/WBE subcontractor listed on the MBE/WBE Participation Form (see attached).

Waiver of MBE/WBE Participation Goals: Request for complete or partial waiver of the contractor's MBE/WBE participation goals must be made in writing, stating all details in the request, the circumstances, and all relevant information. The request must be accompanied by a record of all efforts taken by the bidder/proposer to locate MBE/WBEs, solicit MBE/WBEs, seek assistance from CMHA's Economic Inclusion Coordinator, or seek help from other community/business resources or technical assistance agencies. CMHA will respond in writing to the Waiver Request within five (5) business days upon receipt.

Company Name _____

Contact Person _____

Signature _____ Date _____

THIS PAGE INTENTIONALLY BLANK



Contractor's MBE/WBE Participation Report Form

Contract/PO#: _____ Project Description: _____

Please list below the names of all firmly committed MBE and WBE subcontractors that will work on the project, their MBE/WBE Status, the dollar amount, and the percentage of total contract amount that will be performed by the entities. The MBE/WBE participation can include subcontracts or purchases of services, materials and supplies directly related to the contract.

(Please check one) _____ Proposed _____ Amended _____ Final

Name of Subcontractor(s)	MBE	WBE	\$ Dollar Amount	% of Contract Amount
Total <u>MBE</u> Dollar Amount and Percentage of Contract Amount				
Total <u>WBE</u> Dollar Amount and Percentage of Contract Amount				

Company Name _____

Contact Person (print) _____

Signature _____

Date _____

THIS PAGE INTENTIONALLY BLANK



Prospective Business Vendor:

Enclosed, you will find a variety of forms regarding Section 3 (Housing & Urban Development Opportunities Act of 1968, as amended). Please complete and attach the Section 3 forms with your bid submission. **Failure to submit the appropriate forms may jeopardize the proposal/bid up to and including the possibility of said proposal/bid being deemed non-responsive**

Anyone claiming to be a Section 3 Business Concern shall be required, as set forth by procedure, to provide evidence of such status. Section 3 Business Concerns claiming Section 3 Preference status must meet that status at the time the bid, quote or proposal is submitted to CMHA.

Section 3 Required Forms:

- 1) Section 3 Assurance of Compliance & Section 3 Clause
- 2) Section 3 Action Plan
- 3) Section 3 Certification for Preference
- 4) Preference Category Acknowledgement S3 Residents

If you need any assistance or help regarding Section 3, feel free to contact us. We look forward to assisting you with Section 3 implementation.

Sincerely,

Jacquetta Brown

Jacquetta Brown
Economic Inclusion Coordinator
(513) 977-5683

Jacquetta.Brown@cintimha.com
Section3@cintimha.com



Contractor Section 3 Action Plan Submission

The Section 3 Action Plan is a requirement for contracting opportunities with CMHA. The Section 3 Action Plan must indicate/describe the proposed strategies for achieving the Section 3 training and/or employment goals, and subcontracting numerical goals, when and if **newly created opportunities** are generated upon awarding of contracts. **Failure to submit the Section 3 Action plan may jeopardize the proposal/bid up to and including the possibility of said proposal/bid being deemed non-responsive.**

Please review the Section 3 Action Plan information attached. **All Sections need to be completed and signed.** This information will help to assist you in formulating your Section 3 Action Plan. You will need to address each question and check the appropriate boxes in regards to how your company will strive to achieve Section 3 Compliance to the “**greatest extent feasible**”.

Please identify individual(s) responsible for planning, implementing and tracking the projects’ Section 3 training, employment and/or contracting goals:

Name(s): _____

Contact Info: _____

Title(s): _____

Section 3 Hiring/Training Opportunity Strategies

Please check any and all efforts from the below mentioned categories that your company will utilize to recruit, solicit, encourage, facilitate and hire Section 3 Residents when new hiring/training opportunities are generated through the awarding of the contract. **Some of the items will be mandatory as indicated with **.** Your acknowledgement is still needed, so please check accordingly.

The Section 3 Action Plan is subject to audit at anytime during the awarding of the contract through the duration of the contract by the Section 3 Compliance Coordinator.

****☐ Commit that when new workers are hired by the company and/or subcontractors as a result of the contract, 30% of those hired will be Section 3 Residents.**

****☐ Contact the CMHA Section 3 Compliance Coordinator regarding new hiring and training opportunities.**

****☐ Provide the CMHA Section 3 Compliance Coordinator with a monthly report listing all hiring and training opportunities.**

****☐ Post notice (placards) at the worksite where the work is being done, indicating any new hiring and training opportunities**

☐ Facilitate or co-facilitate Hiring Halls within close proximity to where the work is being done for Section 3 Residents.

☐ Contact/Meet with Resident Associations informing them of new training and hiring opportunities.

☐ Advertise new training and hiring opportunities in community and diversity newspapers/websites.

☐ Sponsor or participate in job informational meetings or job fairs in the neighborhood or service area of the Section 3 covered project.

☐ Establish an internal training program (pre-apprenticeship) that is consistent with Dept. of Labor requirements to provide Section 3 Residents with the opportunity to learn skills and job requirements.

☐ Distribute flyers to CMHA owned sites indicating the number and types of jobs that will be offered with contact information.

☐ Maintain a file of eligible qualified Section 3 Residents for future employment opportunities.

☐ Incorporate into contract (after selection of bidders but prior to the execution of contracts), a negotiated provision for a specific number of Section 3 Residents to be trained and/or employed during the contract.

☐ Other:

Note: You are required to provide opportunities to "the greatest extent feasible" in order to comply with the requirements of Section 3. In the event that you are not able to hire/train and/or contract with Section 3 Residents and/or Section 3 Business Concerns, you will be required to document why you were unable to meet the numerical goals.

Signature: _____

Date: _____

Section 3 Subcontracting Opportunity Strategies

Please check any and all efforts from the below mentioned categories that your company will utilize to recruit, solicit, encourage, facilitate and contract with Section 3 Business Concerns when new subcontracting opportunities are generated through the awarding of the contract. **Some of the items will be mandatory as indicated with **.** Your acknowledgement is still needed, so please check accordingly.

The Section 3 Action Plan is subject to audit at anytime during the awarding of the contract through the duration of the contract by the Section 3 Compliance Coordinator.

****☐ Commit that when subcontracting occurs, 10% of the total dollar amount subcontracted out by the company and/or by subcontractors will go to Section 3 Business Concerns.**

****☐ Contact the CMHA Section 3 Compliance Coordinator regarding all new subcontracting opportunities.**

****☐ Provide the CMHA Section 3 Compliance Coordinator with a monthly report listing all subcontracting opportunities.**

☐ Advertise new contracting opportunities in community and diversity newspapers/websites.

☐ Maintain a file of eligible qualified Section 3 Business Concerns for future contracting opportunities.

☐ Incorporate into contract (after selection of bidders but prior to the execution of contracts), a negotiated provision for a specific amount of work to be contracted with Section 3 Business Concern(s) during the contract.

☐ Sponsor or participate in minority, women, small business expositions and or conferences in the Cincinnati, Ohio area to network and promote contracting opportunities with Section 3 Business Concerns.

☐ Outreach to business assistance agencies, minority contracting associations, community organizations, to network and promote contracting opportunities with Section 3 Business Concerns.

☐ Contact/Meet with Resident Associations informing them of new contracting opportunities.

☐ Outreach to trade/labor organizations to network and promote contracting opportunities with Section 3 Business Concerns.

☐ Host/Facilitate workshops geared to Section 3 Business concerns on contracting procedures and opportunities.

☐ Become an active mentor to Section 3 Business Concerns.

☐ Other:

Note: You are required to provide opportunities to "the greatest extent feasible" in order to comply with the requirements of Section 3. In the event that you are not able to hire/train and/or contract with Section 3 Residents and/or Section 3 Business Concerns, you will be required to document why you were unable to meet the numerical goals.

Signature: _____

Date: _____



CMHA
Section 3 Assurance of Compliance Form

Training, Employment, and Contracting Opportunities for Section 3 Residents and Section 3 Business Concerns

- A. The project assisted 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. 170u. Section 3 requires that to the *greatest extent feasible, newly created opportunities* that are generated by the awarding of this contract be given to:
- Section 3 Residents (30% minimum goal of new hires) upon their qualifications.
 - Section 3 Business Concerns (10% of total construction subcontracting dollar amount awarded – based upon their qualifications).
 - Section 3 Business Concerns (3% of total non-construction subcontracting dollar amount awarded- based upon their qualifications).
- B. Notwithstanding any other provision of this contract, the applicant shall carry out the provisions of said Section 3 and the regulations issued pursuant thereto by the Secretary set forth in 24 CFR Part 135, and all applicable rules and orders of the Secretary issued thereunder prior to the execution of this contract. The requirements of said regulations include but are not limited to development and implementation of a Section 3 Action Plan/Strategy for utilizing Section 3 Business Concerns; the making of a good faith effort, as defined by the regulation, to provide training, employment and business opportunities required by Section 3; and incorporation of the “Section 3 Clause” specified by Section 135.20 (b) of the regulations in all contracts for work in connection with the project. The applicant and recipient agency, certifies and agrees that it is under no contractual or other disability which would prevent it from complying with these requirements.
- C. Compliance with the provision of Section 3, the regulations set forth in 24 CFR Part 135, and all applicable rules and orders of the Secretary issued thereunder prior to approval by the Government of the application of this contract, shall be a condition of the Federal financial assistance provided to the project, binding upon the applicant, its contractors and subcontractors, its successors, and assigns to the sanctions specified by the contract, and to such sanctions as are specified by 24 CFR Section 135.

Applicant: _____

Signature: _____

Address: _____

Date: _____

Section 3 Clause

All Section 3 covered contracts 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 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 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 person(s) taking applications for each of the positions; and the anticipated date the work shall begin.
- D. The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 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. In the event of a determination by the Executive Director or his/her designee that the Contractor is not in compliance with the section 3 clause or any rule, regulation, or report submission requirements of the CMHA, this contract may be canceled, terminated, or suspended in whole or in part, and the Contractor may be declared ineligible for further CMHA contracts for a period of one to three years.

1.	ARTICLE I CONTRACTOR'S RESPONSIBILITIES	1
1.21.	Emergency	3
2.	ARTICLE II HOUSING AUTHORITY RIGHTS AND RESPONSIBILITIES	4
3.	ARTICLE III A/E'S DUTY, RESPONSIBILITY AND AUTHORITY	5
3.3.	Site Visits and Observation	5
3.4.	Testing and Inspection Services	5
3.5.	A/E Review and Approval of Work.....	5
3.6.	Limitation of A/E's Authority	5
4.	ARTICLE IV PRECONSTRUCTION ACTIVITIES	7
4.1.	Pre-construction Conference.....	7
4.2.	Certificate of Insurance.....	7
4.3.	Building and Trade Permits, Licenses and Codes.....	7
4.4.	Plan Approval and Permits.....	7
4.5.	Trade Permits and Licenses	7
5.	ARTICLE V CONSTRUCTION REQUIREMENTS	9
5.1.	Commencement of Work on Site	9
5.2.	Environmental Controls	9
5.3.	Construction Procedures	9
5.4.	Utilities	10
5.5.	Construction Supervision.....	12
5.6.	Construction Progress Schedule	12
5.7.	Progress Meetings	14
5.8.	Project Coordination.....	15
5.9.	Additional Tests and Inspections	15
5.10.	Review of Contract Documents	15
5.11.	Site Investigation and Conditions Affecting the Work.....	16
5.12.	Protection of the Project	16
5.13.	General Warranty - Materials, Equipment and Workmanship.....	18
5.14.	Specifications and Drawings for Construction.....	21
5.15.	As Built Drawings	22
5.16.	Project Document Maintenance and Submittal	22
5.17.	Temporary Buildings and Transportation of Materials.....	23
5.18.	Facilities	23
5.19.	Progress Cleaning.....	23
5.20.	Use of Premises.....	24
5.21.	Smoking and Tobacco Products	24
5.22.	Correction of the Work	25
6.	ARTICLE VI SUBCONTRACTORS.....	27
6.1.	Evaluation and Approval	27
6.2.	Suspension/Debarment	27
6.3.	Contractor's Responsibility	27
6.4.	Mandatory Contract Provisions/Forms	27
6.5.	Replacement of Subcontractors	27
6.6.	Contingent Assignment of Subcontract	27
6.7.	Prompt Payment of Subcontracts.....	28
6.8.	Subcontracting with Small and Minority Firms, Women's Business Enterprise, and Labor Surplus Area Firms.....	28
7.	ARTICLE VII PAYMENTS.....	30
7.1.	CMHA Obligation	30

7.2.	Forms	30
7.3.	Step One – Pencil Application	30
7.4.	Progress Payments.....	30
7.5.	Allowances	31
7.6.	Unit Prices	31
7.7.	Schedule of Values	31
7.8.	Labor Payments/Retainage.....	32
7.9.	Material Payments/Retainage	32
7.10.	Payments Withheld.....	32
7.11.	Payment Request	32
8.	ARTICLE VIII CONTRACT MODIFICATIONS	34
8.1.	Changes in the Work.....	34
8.2.	Change Order	34
8.3.	Change Order Directive.....	34
8.4.	Change Order Procedure	35
8.5.	Change Order Proposal	35
8.6.	Differing Site Conditions	36
8.7.	Minor Changes in the Work	36
8.8.	Change Order Cost or Credit Determination	37
8.9.	Time Extension.....	39
9.	ARTICLE IX CONSTRUCTION CLOSEOUT	41
9.1.	Final Cleaning.....	41
9.2.	Inspection and Construction of the Work	41
9.3.	Routine Inspections	41
9.4.	Substantial Completion.....	41
9.5.	Demonstration and Training, Operating Appurtenances	43
9.6.	Acceptance of Defective Work	43
9.7.	Building Commissioning.....	44
9.8.	Contract Completion.....	44
10.	ARTICLE X SUSPENSION AND TERMINATION	45
10.1.	Suspension of the Work.....	45
10.2.	Termination for Convenience	45
10.3.	Termination for Cause/Default	47
10.4.	Contractor Insolvency	48
11.	ARTICLE XI DISPUTE RESOLUTION/CLAIM PROCEDURE	50
11.1.	General.....	50
11.2.	Initiation of a Claim	50
11.3.	Substantiation of Claims General	50
11.4.	Substantiation of Claims for increase of the Contract Sum.....	51
11.5.	Substantiation of Claims for Extension of the Contract Time	51
11.6.	Certification of a Claim	51
11.7.	Delay and Delay Damage Limitations	51
11.8.	Derivative Claims	52
11.9.	Claim Decision.....	52
11.10.	Audit of a Claim	52
11.11.	False Certification of a Claim	53
12.	ARTICLE XII WARRANTY.....	54
12.1.	Warranty of Title.....	54
12.2.	Warranty of Construction	54
12.3.	Warranty Walk-through Contractor	54

13. ARTICLE XIII BONDS	55
13.1. Bid Bond/Guaranty	55
13.2. Payment and Performance Bond	55
14. ARTICLE XIV INSURANCE	56
14.1. Contractor's General Insurance Requirements	56
14.2. Minimum Coverage Requirements	56
14.3. Waivers of Subrogation	58
15. ARTICLE XV INDEMNIFICATION	59
16. ARTICLE XVI DAMAGES.....	60
16.1. Liquidated Damages.....	60
16.2. Mutual Waiver of Consequential Damages.....	61
17. ARTICLE XVII EQUAL OPPORTUNITY.....	62
17.1. Prohibition Against Discrimination	62
18. ARTICLE XVIII SECTION 3.....	64
18.8. Section 3 Reporting Requirements	64
19. ARTICLE XIX LABOR STANDARDS.....	65
19.1. Compliance with Davis Bacon and Related Acts requirements	65
19.2. Minimum Wages.....	65
19.3. Withholding of Funds.....	66
19.4. Payrolls and Basic Records.....	66
19.5. Apprentices & Trainees.....	67
19.6. Compliance with Copeland Act requirements	69
19.7. Contract Termination; Debarment	69
19.8. Disputes Concerning Labor Standards	69
19.9. Certification of Eligibility	69
19.10. Contract Work Hours and Safety Standards Act.....	69
19.11. Subcontracts	69
19.12. Non-Federal Prevailing Wage Rates	70
20. ARTICLE XX HEALTH, SAFETY AND ACCIDENT PREVENTION	71
20.1. General Contractor Requirements.....	71
20.2. Notification of Non-Compliance Procedure.....	71
20.3. Safety Plan	71
20.4. Safety Data Sheets	71
20.5. Hazardous Materials	71
20.6. Fires or Hot-Work	72
20.7. Explosives and Blasting	72
21. ARTICLE XXI CONTRACT DOCUMENTS AND CONTRACT RECORDS.....	73
21.1. Examination and Retention of Contractor's Records	73
21.2. Examination and Audit of Contractor's Records.....	73
21.3. Ownership of Contract Documents.....	74
21.4. Intent of Contract Documents	74
21.5. Use of Electronic Files	74
21.6. Order of Precedence.....	74
22. ARTICLE XXII MISCELLANEOUS	76
22.1. Assignment	76
22.2. Contractor Performance Evaluation	76
22.3. Prohibition Against Liens	76
22.4. Conflict of Interest	76

22.5.	Limitation on Payments Made to Influence Certain Federal Financial Transactions	76
22.6.	Procurement of Recovered Materials.....	77
22.7.	Royalties and Patents.....	77
22.8.	Contract Period	77
22.9.	Other Contracts.....	77
22.10.	Drug-Free Workplace	78
22.11.	Energy Efficiency and Sustainability Requirements.....	78
22.12.	Clean Air and Water	78
22.13.	Public Relations.....	78
22.14.	Governing Law	78
22.15.	Written Notice	78
22.16.	Taxes	78
22.17.	Computing Time.....	78
22.18.	Time is of the Essence.....	79
22.19.	Extent of Contract.....	79
22.20.	Severability.....	79
22.21.	Facsimile/Electronic Mail Signature.....	79
22.22.	No Third Party Interest	79
22.23.	No Waiver	79
22.24.	Assignment of Antitrust Claims.....	79
22.25.	Survival of Obligations	80
22.26.	Force Majeur.....	80
22.27.	Privacy.....	80
22.28.	Contractor Status	80
23.	ARTICLE XXIII DEFINITIONS AND TERMINOLOGY	81

1. ARTICLE I CONTRACTOR'S RESPONSIBILITIES

- 1.1.** The Contractor shall perform the Work in a workmanlike manner, consistent with the standards of skill and care exercised by entities licensed to perform (where required by Applicable Law) and regularly performing comparable work in the same or similar locality under the same or similar circumstances.
 - 1.1.1.** Furthermore, Contractor agrees to adhere to CMHA's quality standards as outlined in the Contract Documents; this includes, but is not necessary limited to, CMHA's Gold Standards of performance.
- 1.2.** The Contractor shall perform the Work in accordance with the Contract Documents.
- 1.3.** The Contractor shall furnish all labor, services, materials, tools, equipment, superintendence, and transportation necessary for performance of the Work.
 - 1.3.1.** Contractor shall also furnish all necessary water, heat, light, and power not made available to the Contractor by CMHA.
- 1.4.** The Contractor shall perform on the site and with its own organization, work equivalent to at least {12%} (unless otherwise indicated) of the total amount of work to be performed under the order.
 - 1.4.1.** This percentage may reduce by a supplemental agreement to this Construction Contract if, during performing the work, the Contractor requests a reduction and the Contracting Officer determines that the reduction would be the advantage of CMHA.
- 1.5.** At all times during performance of this Construction 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 whose qualifications and experience are satisfactory to CMHA and has authority to act on behalf of the Contractor.
- 1.6.** The Contractor shall be responsible for all damages, including, but not limited to, damages to persons or property, that occur as a result of the Contractor's breach of this Construction Contract, fault or negligence.
 - 1.6.1.** The Contractor shall take proper safety and health precautions to protect the Work, the workers, the public, and the property of others.
 - 1.6.2.** The Contractor shall hold and save CMHA, including CMHA's officers, employees, consultants, and agents, free and harmless from damages, claims, demands, suits and liabilities of any nature, including but not limited to, all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs, caused by the Contractor's breach of this Construction Contract, fault, negligence or performance of the Work.
 - 1.6.3.** The Contractor shall also be responsible for all storage, protection and cleaning of materials delivered and Work performed on the Project, until Contract Completion and acceptance of the entire Project by CMHA, except for any completed unit of Work which may have not been accepted under the Construction Contract.
- 1.7.** The Contractor shall lay out the work from base lines and bench marks indicated in the drawings and be responsible for all lines, levels, and measurements of all work executed under the Contract Documents.
 - 1.7.1.** The Contractor shall verify the lines, bench marks, figures and dimensions indicated in the Contract Documents before laying out the work and will be held responsible for any resulting errors resulting from its failure to do so.
- 1.8.** The Contractor shall confine all operations (including storage of materials) on CMHA's premises to areas authorized or approved by the Contracting Officer.
- 1.9.** The Contractor shall at all times keep the work area, including storage areas, free from accumulations of waste materials.
 - 1.9.1.** After completing the Work and before final inspection, the Contractor shall:
 - A.** Remove from the premises all scaffolding, equipment, tools, materials (including rejected materials) that are not the property of CMHA and rubbish caused by its work;
 - B.** Leave the work area in a clean, neat, and orderly condition satisfactory to the Contracting Officer;
 - C.** Perform all specified tests; and
 - D.** Deliver the installation in complete and operating conditions.
- 1.10.** The Contractor must perform the Work so as to not interfere with, disturb, hinder, or delay the services of separate consultants or the work of separate contractors.

- 1.10.1.** The Contractor must cooperate and coordinate fully with all separate consultants and separate contractors and must freely share all of the Contractor's Project-related information with them to facilitate the timely and proper performance of the Work and of the services and work of the separate consultants and separate contractors.
- 1.10.2.** The Contractor must afford every separate consultant and separate Contractor proper and safe access to the Site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of their services and work.
- 1.10.3.** If the Contractor damages the property or work of any separate consultant or separate Contractor caused by Contractor or by failure to perform the Work with due diligence, delays, interferes with, hinders, or disrupts the services of any separate consultant or separate Contractor who suffers additional expense and damage as a result, the Contractor is responsible for that damage, injury, or expense.
- 1.10.4.** The intent of 1.10 is to benefit any separate consultants and separate contractors and to demonstrate that the separate consultants or separate contractors are intended third-party beneficiaries of Contractor's obligations under the Contract.
- 1.11.** If the proper execution or result of any part of the Work depends upon work performed or services provided by CMHA, a separate consultant, or a separate Contractor, the Contractor must inspect that other work and appropriate instruments of service, and promptly report to CMHA in writing any defects or deficiencies in that other work or services that render it unavailable or unsuitable for the proper execution and results of the Work.
 - 1.11.1.** The Contractor's failure to inspect and promptly report any issues in writing will constitute an acceptance of the other work and services as fit and proper for integration with the Contractor's Work unless in the opinion of CMHA's Project Manager and/or Construction Contract Administrator the defects and deficiencies in the other work and appropriate instruments of service were not reasonably discoverable at the time of the Contractor's inspection.
- 1.12.** The Contractor shall not delay the Work on account of any claim, dispute, or action between the Contractor and CMHA or the Contractor a Separate Consultant or Separate Contractor.
- 1.13.** The Contractor shall complete all portions of Work in the sequence in the Construction Progress Schedule.
- 1.14.** The Contractor shall develop and keep a Construction Progress Schedule and prepare and keep current a schedule of submittals that is coordinated with the Construction Progress Schedule for CMHA's acceptance.
- 1.15.** The Project's regular work hours shall be between 8:00 am and 5:00 pm, or as determined and approved by CMHA.
 - 1.15.1.** The Contractor may modify the regular work hours only if Contractor receives written authorization from CMHA's Project Manager and/or Construction Contract Administrator.
- 1.16.** The Contractor shall coordinate the Work with the activities and responsibilities of the Project's architect or engineer ("A/E"), CMHA and Contractor's surety to meet the contractual dates for Substantial Completion and Contract Completion.
- 1.17.** The Contractor shall remove any snow and ice as may be required for reasonably safe access to the Project, including, without limitation, building entries, driveways, parking lots, and sidewalks.
- 1.18.** The Contractor shall keep a daily log containing a record of weather, number of workers on Site for the Contractor, identification of equipment, Work accomplished, problems encountered and other similar relevant data.
- 1.19.** The Contractor hereby represents and agrees that, prior to submitting its bid or quote to perform the Work on the Project, it has had a competent person carefully and diligently review each part of the Contract Documents, including the Divisions of the Specifications and parts of the Drawings that are not directly applicable to the Work.
 - 1.19.1.** Contractor further represents and agrees that, based upon its careful and diligent review of the Contract Documents, that it is not aware of any conflicts, inconsistencies, errors, or omissions in the Contract Documents for which it has not notified CMHA or the A/E.
 - 1.19.2.** If there are any such conflicts, inconsistencies, errors, or omissions in the Contract Documents, the Contractor will:
 - A.** Provide the labor, equipment, or materials of the better quality or greater quantity of Work; and/or
 - B.** Comply with the more stringent requirements.

- 1.19.3.** The Contractor will not be entitled to any additional compensation for any conflicts, inconsistencies, errors, or omissions that would have been discovered by such careful and diligent review.
- 1.20.** The Contractor hereby represents and agrees that the Project is a public project involving public funds.
 - 1.20.1.** The Contractor further understands that CMHA expects and requires that each Contractor adhere to the highest ethical and performance standards.
 - 1.20.2.** Accordingly, Contractor hereby pledges and agrees that:
 - A.** It will act at all times with absolute integrity and truthfulness in its dealings with CMHA and the A/E;
 - B.** It will use its best efforts to cooperate with CMHA and the A/E and all other contractors and consultants on the Project and at all times will act with professionalism and dignity in its dealings with CMHA, the A/E, and other contractors;
 - C.** It will assign only competent supervisors and workers to the Project, each of whom is fully qualified to perform the tasks that are assigned to him/her; and
 - D.** It has read, understands and will comply with the terms of the Contract Documents.
- 1.21. Emergency**
 - 1.21.1.** In the event of an emergency affecting the safety of the Project, other property, or individuals, the Contractor, without special instructions or authorization, shall act to prevent the threatened damage, injury, or loss.
 - 1.21.2.** If the Contractor believes that it is entitled to an adjustment of the Contract Sum or Contract Times, or both, on account of its actions in response to any emergency, the Contractor may request a Change Order by giving written notice no later than 48-hours after the emergency.

2. ARTICLE II HOUSING AUTHORITY RIGHTS AND RESPONSIBILITIES

- 2.1.** CMHA shall designate a Project Manager and/or Construction Contract Administrator for the Project.
- 2.2.** CMHA shall have access to the Work and Site at all times, whether the Project is in preparation or progress.
- 2.3.** CMHA is not responsible for construction means, methods, manners, techniques, sequences, procedures, or for safety precautions and programs in connection with the Work, or for the Contractor's failure to carry out the Work in conformity with the Contract Documents.
- 2.4.** Upon the date indicated in the Notice to Proceed, CMHA shall provide the Site to the Contractor in a condition to permit the Contractor to perform the Work.
 - 2.4.1.** If the Site provided by CMHA is not in a condition to permit the Contractor to perform the Work, Contractor shall notify CMHA's Project Manager and/or Construction Contract Administrator within 48 hours of the Notice to Proceed and identify the conditions which are preventing Contractor from performing the Work.

3. ARTICLE III A/E'S DUTY, RESPONSIBILITY AND AUTHORITY

3.1. The A/E for this Contract and any successor shall be designated in writing by CMHA.

3.2. The A/E's duties and responsibilities may include, but shall not be limited to:

3.2.1. Attend and conduct the Construction Progress Meetings.

3.2.2. Making periodic visits to the work site and on the basis of his/her on-site inspections, issuing written reports to CMHA which shall include all observed deficiencies.

A. The A/E shall electronically send a copy of the report to CMHA and to the Contractor's designated representative at the site.

3.2.3. Making modifications in drawings and technical specifications and assisting the Contracting Officer in the preparation of Change Orders and other Contract Modifications for issuance to the Contracting Officer.

3.2.4. The A/E may authorize minor changes or alterations in the Work that are consistent with the intent of the Contract Documents and do not involve adjustment of the Contract Sum or Contract Times, or both.

A. The A/E has no authority to authorize the Contractor to perform additional or extra Work for which the Contractor may seek adjustment of the Contract Sum or the Contract Time, or both.

3.2.5. Reviewing and making recommendations with respect to:

A. The Contractor's Construction Progress Schedules;

B. The Contractor's shop and detailed drawings; and

C. The Contractor's price breakdown and progress payment estimates-

3.2.6. Assisting in inspections, signing Certificates of Substantial Completion and Contract Completion, and making recommendations with respect to acceptance of work completed under the Contract; and

3.2.7. Approve or certify applicable forms required under the Contract Documents.

3.3. Site Visits and Observation

3.3.1. The A/E shall notify, advise, and consult with CMHA and protect CMHA against Defective Work throughout completion of the Project, which includes the Correction Period, and for such time period CMHA may extend A/E's services.

A. The A/E should designate a field representative, subject to CMHA's approval, to attend meetings, to observe and check the progress and quality of the Work, and to take action as necessary or appropriate to achieve conformity with the Contract Documents.

B. The A/E shall have its consultants attend to the Project at intervals required by its agreement or required by CMHA.

3.3.2. The A/E is authorized to disapprove or reject Defective Work. The A/E shall immediately notify CMHA any time the A/E disapproves or rejects an item of Work.

3.3.3. The A/E is not responsible for construction means, methods, manners, techniques, sequences, procedures, or for work safety precautions and programs in connection with the Work, or for the Contractor's failure to carry out the Work in conformity with the Contract Documents.

3.4. Testing and Inspection Services

3.4.1. Unless otherwise specified in the Contract Documents, CMHA shall apply for, secure, and pay for the costs of structural testing and special inspections under the Ohio Building Code; testing including geotechnical analysis, environmental testing and analysis, concrete, masonry, structural steel, reinforcing steel, welding, bolts, steel connections, HVAC systems and controls, plumbing and piping, air, and water balancing and testing, or other testing, or approvals required by Applicable Law.

3.5. A/E Review and Approval of Work

3.5.1. Any information the Contractor submits to the A/E is for the sole purpose of determining whether the Work and information is generally consistent with the Contract's intent, and will not relieve the Contractor of its sole responsibility for the performance, preparation, completeness, and accuracy of the Work and information.

3.5.2. By reviewing information submitted by the Contractor, A/E is not taking on responsibility for construction means, methods, manners, techniques, sequences, procedures, or for work safety precautions and programs in connection with the Work.

3.6. Limitation of A/E's Authority

- 3.6.1.** The A/E shall serve as the technical representative for CMHA with respect to architectural, engineering, and design matters related to the Work performed under the Contract.
- 3.6.2.** Subject to the Contractor's responsibility under ARTICLE I, the A/E may provide direction on Contract performance.
- 3.6.3.** Such direction shall be within the scope of the Contract and may not be of a nature which:
 - A.** Institutes additional work outside of the scope of the Contract;
 - B.** Constitutes a change;
 - C.** Causes an increase or decrease in the cost of the Contract;
 - D.** Alters the Construction Progress Schedule;
 - E.** Changes any of the other express terms or conditions of the Contract;
 - F.** Accepts any defective or non-conforming services, Work, or vendor-furnished items;
 - G.** Makes any settlements on CMHA's behalf;
 - H.** Assumes any responsibilities of the Contractor or Subcontractors; or
 - I.** Binds CMHA to any authorizations under, modifications of, or amendments to the Contract Documents other than as expressly provided.
- 3.7.** The Contractor acknowledges and agrees that CMHA's legal counsel may from time to time provide legal services to the Project and that in doing so may communicate with the A/E, as CMHA's representative on the Project.
 - 3.7.1.** The Contractor agrees that such communications will be privileged communications and, if there is a Claim contemplated or pending, any written communications will be protected by the attorney client privilege and considered confidential work product.

4. ARTICLE IV PRECONSTRUCTION ACTIVITIES

4.1. Pre-construction Conference

4.1.1. Within ten (10) calendar days, unless otherwise indicated by CMHA, of Contract execution, and prior to the commencement of work, the Contractor shall attend a preconstruction conference with CMHA representatives; CMHA's A/E, and other interested parties convened by CMHA.

A. The conference will serve to acquaint the participants with the general plan of the construction operation and all other requirements of the Contract.

B. CMHA will provide the Contractor with the date, time, and place of the conference.

4.2. Certificate of Insurance

4.2.1. Before commencing work, the Contractor and each Subcontractor shall furnish CMHA with certificates of insurance showing the minimum insurance coverage is in force and will insure all operations under the Contract.

4.3. Building and Trade Permits, Licenses and Codes

4.3.1. The Contractor shall give all notices and comply with all applicable laws, ordinances, codes, rules, and regulations.

A. Notwithstanding the requirement of the Contractor to comply with the drawings and specifications in the Contract, all Work installed shall comply with all applicable laws, ordinances, codes, rules, and regulations, as may be amended by any waivers.

B. Before installing the Work, the Contractor shall examine all drawings and the specifications for compliance with applicable laws, ordinances, codes, rules, and regulations bearing on the work and shall immediately report, in writing, any discrepancy it may discover to the CMHA's Project Manager and/or Construction Contract Administrator and the A/E.

i. If required by any governing jurisdiction, CMHA will modify the Contract by change order so that the Work on the Project will conform to the applicable laws, ordinances, codes, rules, and regulations.

C. If the Contractor installs any Work that does not comply with all applicable laws, ordinances, codes, rules, and regulations before providing notice hereunder to CMHA and receiving direction from CMHA, Contractor shall be responsible for all costs resulting from any removal, demolishing, and disposing of any Work that must be replaced or repaired.

4.3.2. Notwithstanding the provisions below, the Contractor shall secure and pay for all permits, fees, and licenses necessary for the proper execution and completion of Work.

A. Where CMHA 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.

4.4. Plan Approval and Permits

4.4.1. The A/E shall facilitate the required structural, plumbing, HVAC, and electrical plan reviews during the design phase, as required by the governing jurisdiction for securing an overall building permit to start construction.

4.4.2. The Contractor shall schedule and attend all intermediate and final inspections required for any permit applicable to the Work or any governing jurisdiction.

4.4.3. The Contractor shall schedule with the State Fire Marshal or local fire authority for the life safety inspection for occupancy permits.

4.4.4. The Contractor shall give the A/E and CMHA reasonable notice of the dates and times for any inspections.

A. The Contractor shall pay for all initial inspections and re-inspections required as a result of Contractor's failure to receive approval for its Work.

4.5. Trade Permits and Licenses

4.5.1. The Contractor shall secure and pay the fees for any permit, inspection, or license applicable to the Contractor's particular trade.

4.5.2. Local Permits:

A. The Contractor shall secure and pay the fees for any permits, inspections, licenses, capacity charges, or tap fees required by local authorities having jurisdiction over the Project.

- i. The Contractor shall give the A/E and CMHA reasonable notice of the date(s) arranged for inspections.
- 4.5.3. [National Pollutant Discharge Elimination System \(NPDES\) Storm Water General Permit](#):
 - A. The A/E shall secure the NPDES general permit by submitting a [Notice of Intent \(NOI\)](#) application form to the Ohio Environmental Protection Agency at least 45 days prior to the start of construction.
 - i. The Contractor shall be a co-permittee, if required under Applicable Law.
 - B. The A/E shall prepare and certify the storm water pollution prevention plan to provide sedimentation and erosion controls at the Project. The A/E shall prepare and process the required [Notice of Termination \(NOT\)](#) prior to Contract Completion.

5. ARTICLE V CONSTRUCTION REQUIREMENTS

5.1. Commencement of Work on Site

- 5.1.1.** Unless CMHA agrees otherwise in writing, the Construction Stage will commence with CMHA issuing the Notice to Proceed and will terminate upon CMHA issuing a Certificate of Contract Completion to the Contractor. The Certificate of Contract Completion will be issued in accordance with the requirements of the Contract Documents and will not occur until after CMHA issues a Certificate of Substantial Completion, a Certificate of Occupancy is issued for the Project, and the Contractor has completed all items on the punch list delivered to Contractor by CMHA as provided in Article IX. The time period for Contract Completion is provided in Section 9.8.
- 5.1.2.** Notice to Proceed:
 - A.** The Contractor shall begin work upon the date indicated in a written Notice to Proceed from CMHA or its designee.
 - i.** The Contractor shall not begin work prior to receiving such notice.
 - B.** Typically, the Notice to Proceed shall be issued within 180 days of CMHA Board of Commissioner Approval.
 - C.** If the Notice to Proceed is not issued within 180 days of CMHA Board of Commissioner Approval, CMHA may, in its sole discretion, terminate the Contract without recourse from the Contractor.

5.2. Environmental Controls

- 5.2.1.** The Contractor shall protect its Work and materials from damage from water, moisture, and other weather, including damage from water run-off from other property or structures, and damage from heat, cold, and humidity.
- 5.2.2.** Contractor is not authorized to use permanent HVAC system without express written authorization from CMHA.
- 5.2.3.** Until the permanent HVAC system is complete and available for use:
 - A.** The Contractor shall make arrangements and pay for installation and maintenance of temporary heating, cooling and ventilating systems; and
 - B.** The Contractor shall pay the costs incurred in operating the temporary heating, cooling and ventilating systems.
- 5.2.4.** When the permanent HVAC system is complete and available for use:
 - A.** The Contractor shall start up and maintain operation of the permanent HVAC system, including filters, and promptly remove temporary heating, cooling and ventilating systems.
 - B.** If the Project consists entirely of new construction, the Contractor shall pay the costs of energy consumed in operating the permanent HVAC system until Substantial Completion.
- 5.2.5.** From the date of Substantial Completion, CMHA shall pay the cost of operating the permanent HVAC system for the occupied portion of the Project.
- 5.2.6.** Use of the permanent HVAC system during construction shall not change, modify or reduce the Contractor's warranty and service obligations under the Contract Documents.

5.3. Construction Procedures

- 5.3.1.** The Contractor is solely responsible for and has control over all construction means, methods, techniques, sequences, and procedures, for safety precautions and programs in connection with the Work, and for coordinating all portions of the Work.
- 5.3.2.** If the Contract Documents give instructions that affect construction means, methods, manners, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety of them and, except as expressly stated herein, be fully and solely responsible for the jobsite safety of the means, manners, methods, techniques, sequences, or procedures.
- 5.3.3.** If the Contractor determines that the means, methods, manners, techniques, sequences, or procedures specified in the Contract Documents may not be safe, the Contractor shall give timely written notice to CMHA.
 - A.** The Contractor shall not proceed with that portion of the Work without further written instructions from CMHA.
- 5.3.4.** Additional Contractor Responsibilities:

- A. The Contractor shall lay out and coordinate all lines, levels, elevations, and measurements for all of the Work, coordinate and verify existing conditions, and notify the A/E and CMHA of discrepancies and conflicts before proceeding with installation or excavation.
- B. The Contractor shall perform all cutting, fitting, or patching required for the Work and shall not endanger the Project by cutting, excavating, or otherwise altering the Project or any part of it.
- C. If the Design requires sleeves for completing the specified Work, the Contractor and all Subcontractors shall coordinate to furnish and install the sleeves.
 - i. The Contractors are responsible for the exact location of and size of all holes and openings required to be formed or built for the Work.
- D. The Contractor's patching shall match and blend with the existing adjacent surfaces.
- E. In addition to the items herein, The Contractor is responsible for all items in REF_Ref449941734 \h CONTRACTOR'S RESPONSIBILITIES.

5.4. Utilities

5.4.1. Availability and Use of Utilities

- A. If CMHA has existing access to utilities, CMHA shall make all reasonably required amounts of utilities available to the Contractor from existing outlets and service as specified herein so long as the utility use does not interfere with CMHA's operations.
 - i. 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 CMHA or where the utility is produced by CMHA, at reasonable rates as determined by CMHA.
 - ii. The Contractor shall carefully conserve any utilities furnished by CMHA without charge.
- B. The Contractor, at its expense and in a manner satisfactory to CMHA, 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.
 - i. Before final acceptance of the Work by CMHA, the Contractor shall remove all the temporary connections, distribution lines, meters, and associated paraphernalia.

5.4.2. The Contractor shall comply with the requirement of the Ohio Revised Code, including ORC.

- A. In addition, before starting excavation or trenching, the Contractor shall determine the location of any underground utilities and notify any public authority or utility having jurisdiction over the Project and secure any required approval.

5.4.3. The Contractor shall give CMHA at least two (2) business days advance notice of excavation of underground utilities registered with the Ohio Underground Utility Protection Services ("OUPS") and underground utilities shown on the drawings and Specifications who are not registered member of OUPS.

- A. The Owner of an underground utility is required within 48 hours' notice to stake, mark, or otherwise designate the location for its utilities in the construction area together with its approximate depth.
- B. In the event that any underground utility owner fails to timely perform, the Contractor shall notify the A/E and contact CMHA regarding the failure of the underground utility to timely perform its work.

5.4.4. Water and Drainage

- A. The Contractor shall provide water necessary for the Work until the permanent plumbing system is available for use.
- B. The Contractor shall provide all temporary drainage and all dewatering necessary for the Work and shall employ pumps, trenches, drains, sumps, and any other equipment necessary or required to provide satisfactory working conditions for the protection, execution, and completion of the Project. The Contractor shall be responsible for determining the specific means and methods to be used for dewatering.
- C. The Contractor shall make arrangements and pay for installation and maintenance of temporary plumbing systems until the permanent plumbing system is available for use.
- D. When the permanent plumbing system is complete and available for use:
 - i. The Contractor shall start up and maintain operation of the permanent plumbing systems, and make arrangements and pay for removal of temporary plumbing systems.
 - ii. If the Project consists entirely of new construction, the Contractor shall pay the costs of water consumed and sewage charges until Substantial Completion.

- iii. If the Project is a renovation of an existing building or structure, addition(s) to an existing building or structure, or any combination of new construction and renovation work that does not allow separate metering of utilities, CMHA shall pay the costs of water consumed and sewage charges.
 - (a) If separate metering of utilities is available, the Contractor and CMHA will pay the costs of their respective use.

- E. After the date of Substantial Completion, CMHA shall pay the costs of water consumed and sewage charges for the occupied portion of the Project.
- F. Use of the permanent plumbing system during construction shall not change, modify, or reduce the Contractor's warranty and service obligations under the Contract Documents.

5.4.5. Electric Service

- A. The Contractor shall provide temporary light and power; pay the charges for temporary electric service, installation, and removal if required.
- B. If the Project consists entirely of new construction, the Contractor shall pay the cost of energy consumed until Substantial Completion.
- C. If the Project is a renovation of an existing building or structure, addition(s) to an existing building or structure, or any combination of new construction and renovation work that does not allow separate metering of utilities, CMHA shall pay the cost of energy consumed.
 - i. If separate metering of utilities is available, the Contractor and CMHA will pay the costs of their respective use.
- D. From the date of Substantial Completion, CMHA shall pay the cost of energy consumed for the occupied portions of the Project.
- E. Use of the permanent electrical system during construction shall not change, modify, or reduce the Contractor's warranty and services obligations under the Contract Documents.

5.4.6. Payment of Utility Services

- A. Unless otherwise expressly stated in the Contract Documents, Contractor shall reimburse CMHA the cost of utility services during the Construction Period.
- B. Unless otherwise expressly stated in the Contract Documents, payment for reimbursement of CMHA for the cost of utility services during the Contract Period shall be made directly to CMHA.
 - i. If payment is not received, CMHA may deduct the cost of utility services from payments otherwise due to the Contractor.
 - ii. If the payments otherwise due to the Contractor are not sufficient to fully reimburse CMHA, either Contractor or its surety shall make whatever payments are necessary to fully reimburse CMHA.
- C. Process for Payment:
 - i. Reimbursement from the Contractor shall be performed on a quarterly basis unless a more frequent payment schedule is agreed upon between CMHA and the contractor prior to start of the project.

5.4.7. Hoisting Facilities

- A. The Contractor shall erect and maintain any hoisting equipment required for its Work.
- B. If the electric service requirements of hoisting facilities differ from that available at the Site, the Contractor shall provide and pay for all necessary connections.
- C. If a permanent elevator is identified in the Contract Documents to be used for hoisting materials or personnel during construction, the Contractor shall furnish an extended warranty and service contract in effect until the expiration of the Correction Period.

5.4.8. Interruption of Existing Services

- A. Whenever it becomes necessary to interrupt existing services in use by CMHA or its tenants, including, but not limited to, sewer, water, gas, steam lines, electric, telephone, and cable service, the Contractor shall continue the associated Work on a non-stop 24-hour per day basis until that Work is completed and the service restored, or perform the associated Work at an alternate time as required by and in coordination with CMHA.

- B. Before beginning that Work, the Contractor shall apply in writing to, and receive approval in writing from CMHA to establish a time when interruption of the service will cause a minimum of interference with the activities of CMHA and its tenants.

5.5. Construction Supervision

- 5.5.1.** Unless waived by CMHA in writing, the Contractor shall provide continuous supervision at the Site through a competent project manager or superintendent when any Work is being performed.
 - A. The Contractor's project manager or superintendent shall not be involved with any work for Contractor other than the Project.
- 5.5.2.** The Contractor's project manager and superintendent shall each have responsibility and authority to act on behalf of the Contractor.
 - A. All communication to the Contractor's project manager and superintendent shall be binding as if given directly by the Contractor.
- 5.5.3.** The Contractor shall submit an outline of the qualifications and experience of the Contractor's proposed project manager and superintendent, including references, to CMHA no later than two (2) business days after request from CMHA.
 - A. For all Subcontracts in excess of \$200,000 and for all other Subcontracts requested by CMHA, the Contractor shall submit an outline of the qualifications and experience of the Subcontractor's proposed project manager and proposed superintendent, including references, to CMHA no later than two (2) business days after CMHA's request.
 - B. CMHA may reject the Contractor or Subcontractor's proposed project manager and/or proposed superintendent.
 - i. If CMHA does not notify the Contractor of the rejection within thirty (30) calendar days after receiving the required information, it shall then indicate that CMHA does not have an objection, but does not affect CMHA's rights under the Contract Documents or any other provision relative to the project manager or superintendent.
 - C. If CMHA rejects the Contractor or Subcontractor's proposed project manager or proposed superintendent, the Contractor shall replace, or cause the Subcontractor to replace the project manager or superintendent (as appropriate) with someone acceptable to CMHA at no additional cost.
- 5.5.4.** If CMHA does not object the proposed project manager or superintendent, the Contractor and its Subcontractor shall not replace their respective project managers and superintendents without prior written approval of CMHA.

5.6. Construction Progress Schedule

- 5.6.1.** The Contractor shall, no later than seven (7) calendar days of the issuance of the Notice to Proceed or another period of time determined by the CMHA, prepare and submit to CMHA for approval three copies of a practicable schedule showing the order in which the Contractor proposes to perform the Work, the dates on which the Contractor contemplates starting and completing the several salient features of the Work (including acquiring labor, materials, and equipment).
 - A. 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.
 - i. The Chart must be in a Critical Path Method (CPM) format.
 - B. If the Contractor fails to submit a schedule, that is acceptable to CMHA, within the time prescribed, CMHA may withhold approval of progress payments or take other remedies under the Contract until Contractor submits the required schedule that is acceptable to CMHA.
- 5.6.2.** The Contractor shall monitor the Work for conformance with the Construction Progress Schedule and shall initiate revisions as required herein.
- 5.6.3.** The Contractor shall enter the actual progress on the Construction Progress Schedule as required by CMHA, and after each update, Contractor shall immediately deliver three copies of the annotated Construction Progress Schedule to CMHA.
 - A. If CMHA determines, upon the basis of inspection conducted, herein that the Contractor is not meeting the approved Construction Progress Schedule, the Contractor shall take steps necessary to improve its progress, including those that may be required by CMHA, without additional cost to CMHA.

- B. If the Contractor is not meeting the approved Construction Progress Schedule, CMHA 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 CMHA deems necessary to demonstrate how the approved rate of progress will be regained.
- 5.6.4.** Failure of the Contractor to comply with the requirements of CMHA shall be grounds for a determination by CMHA that the Contractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the Contract.
 - A. Upon making this determination, CMHA may terminate the Contractor's right to proceed with the work, or any separable part of it.
- 5.6.5.** Unless otherwise agreed to in writing, the Contractor shall develop the Construction Progress Schedule using commercially available, personal computer software acceptable to CMHA and shall submit all baseline and updated schedules to CMHA in the schedule's native format.
 - A. This submission shall be in both electronic and paper format.
- 5.6.6.** The Construction Progress Schedule shall not exceed the time limits under the Contract Documents, shall provide for reasonable, efficient, and economical execution of the Project and shall relate to the entire project to the extent required by the Contract Documents.
 - A. In the event that a Construction Progress Schedule submitted by Contractor shows a completion date that extends beyond the Contract Time permitted to Contractor in the Contract Documents, such Construction Progress Schedule shall not be deemed to modify the Contract Time permitted in the Contract Documents. The Contract Time can only be changed by a properly executed Change Order.
- 5.6.7.** The Contractor shall use the Construction Progress Schedule to plan, organize, and execute the Project, record and report actual performance and progress, and show how it plans to coordinate and complete all remaining work by Contract Completion within applicable Milestones.
 - A. The Project participants shall use the Construction Progress Schedule as a tool for scheduling and reporting sequences and/or the progress of the Work.
 - B. The Contractor shall provide a clear graphics legend and other data including without limitation Milestone dates, constraints, and other items required by the Project and CMHA.
 - C. Each submission shall show CMHA's Project number and Project name, and provide a signature approval and date line for the Contractor.
- 5.6.8.** The Contractor shall provide the following in each Construction Progress Schedule:
 - A. Activity identification and description of each activity broken down to a maximum duration that is appropriate for the activity;
 - B. Contractor or Subcontractor performing each task;
 - C. Contractor's resources and crew size for each activity; and
 - D. Provide early start, early finish, late start, late finish dates.
- 5.6.9.** Each Construction Progress Schedule shall show predecessor activities and successor activities for each activity, entry free float, total float and percentage of completion, and identify the appropriate predecessors and successors for all related activities.
- 5.6.10.** The Construction Progress Schedule shall show all submittal dates, review and approval durations for coordination drawings, Shop Drawings, other action submittals and mock-up Work.
- 5.6.11.** The Contractor shall submit the initial and all updates of the Construction Progress Schedule in graphic and tabular form to CMHA.
 - A. With each monthly Construction Progress Schedule update, the Contractor shall include a list of all changes to the previously approved baseline schedule or monthly updated schedule.
- 5.6.12.** The Construction Progress Schedule shall be managed using early start dates and early finish dates.
 - A. The Contractor must exhaust all existing float before claiming additional time for a Change Order.
- 5.6.13.** The Contractor's failure to submit and properly maintain an approved Construction Progress Schedule may result in withholding payment in accordance with the Contract Documents.
- 5.6.14.** For each Progress Meeting, the Contractor shall provide a 2-6 week look-ahead schedule, as appropriate for the Project.
- 5.6.15.** On a monthly basis, the Contractor shall prepare and submit to CMHA a written report describing:
 - A. Activities begun or finished during the preceding month;

- B. Activities in progress and expected completion;
- C. Activities to be started or finished in upcoming month including, without limitation, the Contractor's workforce size and total resource hours associated with those activities;
- D. Recommendations for adjusting the Construction Progress Schedule to meet Milestone dates, the Substantial Completion date and the Contract Completion date; and
- E. Other information requested by CMHA.

5.6.16. If it is apparent that the Contractor may be unable to meet Critical Path activities, Milestone completion dates, the Substantial Completion date(s) or the Contract Completion date, CMHA shall direct the Contractor to submit within three (3) business days a Recovery Plan to avoid or minimize a delay in the Project.

5.6.17. A Recovery Plan shall include, without limitation, adjustments to one or more of the following:

- A. Workforce
- B. Hours per shift
- C. Shifts per workday
- D. Workdays per week
- E. Equipment
- F. Activity logic

5.6.18. If CMHA approves the Recovery Plan, the Contractor shall prepare a revised Construction Progress Schedule within three (3) business days to CMHA.

- A. If CMHA rejects the Recovery Plan, the Contractor shall submit, within three (3) days of CMHA's rejection, an alternate Recovery Plan to CMHA in writing for review and in accordance the Contract Documents.

5.6.19. The Contractor shall update the Construction Progress Schedule on a monthly basis, or other interval as approved by CMHA, in accordance with the Contract Documents.

- A. The Contractor shall submit a tabular copy showing all changes to the previously approved schedule including, without limitation, logic, float, and actual start date of activities.
 - i. The original or initially approved Construction Progress Schedule and all subsequent Construction Progress Schedules submitted by the Contractor, and accepted by CMHA, shall serve as an affirmation that the Contractor agrees to meet the applicable requirements and updated Construction Progress Schedule.
- B. The Contractor's failure to timely submit updated Construction Progress Schedules as deemed necessary by CMHA may result in withholding payments in.

5.7. Progress Meetings

5.7.1. Unless otherwise indicated in writing, CMHA shall schedule weekly Progress Meetings for the Contractor and other persons involved in the Project as deemed necessary for coordination of the Work by CMHA, including Contractor's Subcontractors on the Project.

- A. The purpose of the Progress Meeting is to review progress on the Project during the previous week, discuss anticipated progress during the following weeks, review critical operations, and discuss critical problems.

5.7.2. The Contractor shall be represented at every Progress Meeting by a person authorized with signatory authority to make decisions regarding possible modifications of the Contract Documents or Construction Progress Schedule.

- A. CMHA shall notify the Contractor and other persons involved in the Project of the time and place of the Progress Meeting that shall thereafter be the same day and hour of the week for the duration of the Project, unless CMHA notifies the Contractor and other Persons involved in the Project of a different day and hour at least two (2) business days in advance.
- B. The Contractor shall have any of its Subcontractors attend the Progress Meeting as determined by the Contractor, or as requested by CMHA.
- C. Unless otherwise indicated in writing, CMHA shall prepare a written report of each Progress Meeting and distribute the report to the A/E and the Contractor.

- D. If any person in attendance objects to anything in a report of a Progress Meeting, the person shall notify CMHA and any other affected person in writing explaining the objections within seven (7) calendar days of receipt of the Progress Meeting report.
- E. The report of each Progress Meeting shall reflect any objection made to the report of the previous Progress Meeting and any response.

5.8. Project Coordination

- 5.8.1.** If determined needed by CMHA, the Contractor or Subcontractor(s), the Contractor shall prepare Coordination Drawings for any Coordination Area.
 - A. The Contractor shall prepare the Coordination Drawings with Computer-Aided Design ("CAD") or Building Information Modeling ("BIM") software acceptable to CMHA.
 - B. The Coordination Drawings shall show the all affected work, including without limitation, plan and elevation dimensions.
- 5.8.2.** After the Contractor completes the Coordination Drawings, the Contractor shall forward a copy of the Coordination Drawings to CMHA.
 - A. The A/E shall report any concerns in writing to the Coordination Participants within fourteen (14) calendar days after receiving the Coordination Drawings.

5.9. Additional Tests and Inspections

- 5.9.1.** If the A/E or CMHA determines that any portion of the Work requires special inspection, testing, or approval not otherwise required under the Contract Documents, the A/E and/or CMHA shall order such inspection, testing, or approval.
- 5.9.2.** If the special inspection, testing, or approval reveals Defective Work, the Contractor shall pay all associated costs and will not be entitled to any related adjustment of the Contract Times.
 - A. Those costs may include without limitation:
 - i. The cost of special inspection, testing, or approval;
 - ii. The cost of additional special inspections, testing, or approvals, to evaluate Remedial Work;
 - iii. The cost of correcting Defective Work; and
 - iv. All related CMHA-incurred fees and charges of contractors, engineers, architects, attorneys, and other professionals.
- 5.9.3.** CMHA may deduct the costs described under the Contract Documents from payments then or thereafter due the Contractor.
 - A. If payments then or thereafter due to the Contractor are not sufficient to cover those amounts, the Contractor or its surety shall immediately pay the amount of the insufficiency to CMHA.
- 5.9.4.** If the special inspection, testing, or approval reveals that the Work complies with the Contract Documents, and the Contractor believes that it is entitled to an adjustment of the Contract Sum or Contract Times, or both, on account of the special inspection, testing, or approval, the Contractor may file a Claim by requesting a Change Order by giving written notice within seven (7) calendar days after the special inspection, testing, or approval.
- 5.9.5.** If the Contractor is aware of the need of an inspection, testing, or approval, or of a need to have any inspection, testing, or approval completed by a particular time to avoid delay, then the Contractor shall timely communicate such information to CMHA.
- 5.9.6.** Except as described in Additional Tests and Inspections, CMHA shall pay for any inspection, testing, or approval that did not become a requirement until after award of the Contract.
- 5.9.7.** The Contractor shall coordinate with and give CMHA reasonable notice of the anticipated dates of all inspections, testing, or approvals.

5.10. Review of Contract Documents

- 5.10.1.** Before starting each portion of the Work, the Contractor shall carefully study and compare the various Contract Documents relative to that portion of the Work, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the Site affecting it.
- 5.10.2.** If the Contractor finds any perceived ambiguity, conflict, error, omission, or discrepancy on or between any of the Contract Documents, or between any of the Contract Documents and any Applicable Law, the Contractor, before proceeding with the Work, shall promptly submit a Request for Information ("RFI") to CMHA for an interpretation or clarification.

- A. Before submitting any RFI, the Contractor shall carefully review the Contract Documents to ensure that the Contract Documents do not answer the RFI.
- B. If Contractor indicates that the information requested in the RFI affects the critical path of the Project's Construction Progress Schedule and attaches the portion of the Project's Construction Progress Schedule that verifies that the information requested in the RFI affects the critical path, CMHA shall make all reasonable efforts to respond to the RFI within seven (7) business days of receiving the RFI.

5.10.3. If the Contractor believes that it is entitled to an adjustment of the Contract Sum or Contract Times, or both, on account of clarifications or instructions issued in response to a RFI, the Contractor may submit a Claim by requesting a Change Order by giving notice within three (3) business days of receiving the RFI response.

5.10.4. If Contractor does not notify CMHA in accordance with 5.10.3 or any other section that addresses adjustments to the Contract Sum and Contract Time, the Contractor will have accepted the RFI response without an adjustment to the Contract Sum or Contract Time and irrevocably waives his right to submit or request an adjustment to the Contract Sum and/or Contract Time.

5.10.5. Frivolous RFI

- A. If the Contractor submits a frivolous RFI, as determined by CMHA, Contractor shall be liable to CMHA for the costs related to the review and response of the RFI.
 - i. CMHA may deduct the costs described herein from payments then or thereafter due the Contractor.
 - ii. If payments then or thereafter due to the Contractor are not sufficient to cover CMHA's costs, the Contractor or its surety shall immediately pay the amount of the insufficiency to CMHA.
- B. Frivolous RFIs may be returned unanswered.

5.10.6. Delays caused by improper or frivolous RFI's are the sole responsibility of the Contractor who shall waive the Contractor's right to seek adjustments to the Contract Sum and Contract Time.

5.11. Site Investigation and Conditions Affecting the Work

5.11.1. The Contractor acknowledges that it has taken steps reasonably necessary to ascertain the nature and location of the work, and that it has investigated and satisfied itself as to the general and local conditions which can affect the work or its cost, including, but not limited to:

- A. Conditions bearing upon transportation, disposal, handling, and storage of materials;
- B. The availability of labor, water, electric power and roads;
- C. Uncertainties of weather, river stages, tides, or similar physical conditions at the site;
- D. The conformation and conditions of the ground; and
- E. The character of equipment and facilities needed preliminary to and during work performance.

5.11.2. 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 CMHA, as well as from the drawings and specifications made part of this contract.

- A. Any failure of the Contractor Site Investigation and Conditions Affecting the Work will not relieve the Contractor from responsibility for properly estimating or properly evaluating the difficulty and cost of successfully performing the Work without additional expense to CMHA.

5.11.3. CMHA assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by CMHA.

- A. Nor does CMHA assume responsibility for any understanding reached or representations made concerning conditions which can affect the Work by any of its officers or agents before execution of this Contract, unless that understanding or representation is expressly stated in this Contract.

5.12. Protection of the Project

5.12.1. The Contractor shall protect the Project from weather and maintain the Work and all materials, apparatus, and fixtures free from injury or damage until Substantial Completion of the Work.

- A. The Contractor shall at all times cover or protect the Work and materials.
- B. The Contractor, at its own expense, shall remove, and replace with new, any Work damaged as a result of the Contractor's failure to provide coverage or protection.

- C. After the date of Substantial Completion of the Work, CMHA is responsible for protecting and maintaining all materials, apparatus, and fixtures for the occupied portion of the Project from injury or damage.
- 5.12.2.** The Contractor shall protect the Project and existing or adjacent property from damage at all times and shall erect and maintain necessary barriers, lateral support, furnish and keep lighted necessary danger signals at night, and take reasonable precautions to prevent injury or damage to individuals or property.
- 5.12.3. Temporary Heating**
 - A. The Contractor shall provide and pay for temporary heating, covering, and enclosures necessary to protect all Work and materials against damage by dampness and cold, to dry out the Work, and to facilitate the completion of Work.
 - B. Any permanent heating equipment used by Contractor or Subcontractors shall be turned over to CMHA in the condition and at the time required by the specifications.
- 5.12.4.** The Contractor shall not load, or permit any part of the Project to be loaded, in any manner that endangers the Project, or any proportion thereof.
 - A. The Contractor shall not subject any part of the Project or existing or adjacent property to stress or pressure that endangers the Project or property.
- 5.12.5. 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 sites, 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.
 - i. 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 specifically directed by CMHA.
 - 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.
 - i. 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 CMHA, 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.
 - i. 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 plans or on different levels 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 commencement of any Work.

- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify, defend and hold harmless CMHA, from and against all claims, (whether alleged or proven), demands, costs, losses, and damages, including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs arising out of or related to the 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 CMHA 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.
 - i. If the Contractor fails or refuses to repair the damage promptly, CMHA may have the necessary Work performed and charge the cost to the Contractor.

5.12.6. Vibration, Noise, and Dust Control

- A. The Contractor shall provide controls/barriers for vibrations, noise, and dust control in occupied buildings as required by the construction operations.
- B. The Contractor will not be permitted to exhaust or release unfiltered air, dust, construction debris, or other undesirable products into the exterior atmosphere or into occupied areas of the building.
 - i. CMHA may limit or stop the Work if the Contractor does not maintain proper air-quality standards.
 - ii. Such stoppage may result in a charge to the Contractor.
- C. In certain occupied buildings, tasks might be of such a nature that noise and vibration cannot be tolerated.
 - i. In such spaces and as approved by CMHA, Work may be scheduled for other than normal working hours.
 - ii. The Contractor is cautioned that weekend or overtime work, if required, shall be performed at no additional cost.
 - iii. Permission to work other than standard hours shall be received from CMHA prior to the occurrence.
 - iv. Weekend or overtime Work shall be reflected in the Construction Progress Schedule.
- D. The Contractor is responsible for vibration control and control of transmission of noise arising from the Work.
- E. Principal considerations that shall be given to noise and vibrations control are:
 - i. Noise control in compliance with Occupational Safety and Health Administration (OSHA) shall be for all areas of the facility, including equipment rooms, boiler rooms, and fan rooms.
 - ii. Vibration control to limit sound produced by construction equipment, and for protection of the equipment existing in the building and the building structure.
 - iii. Vibration control to provide for the maximum usefulness of the facility by keeping levels of vibration within ranges conducive to peaceful enjoyment of residential living or work or other uses for which the facility was designed

5.13. General Warranty - Materials, Equipment and Workmanship

- 5.13.1. The Contractor warrants to CMHA and A/E that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise.
 - A. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit.
 - B. Work, materials, or equipment not conforming to these requirements may be considered defective.
 - C. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage.
 - D. If required by the A/E, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

5.13.2. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify, defend and hold harmless CMHA from and against all claims, (whether alleged or proven), demands, costs, losses, and damages, including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs, arising out of or relating to the Contractor's breach of any warranty obligations.

A. The Contractor's obligation shall be joint and several.

5.13.3. Additional Warranties

A. The Contractor gives the Owner the following additional warranties:

- i.** If the Contractor's Work includes all or part of the exterior roofing system, provided that the A/E has designed the roofing system to be weather tight, the Contractor warrants that the roofing system will be weather tight; and
- ii.** If the Contractor's Work includes all or part of the exterior wall system, provided that the A/E has designed the wall system to be weather tight, the Contractor warrants that the wall system will be weather tight.

(a) Weather tight shall mean the roofing and/or wall system does not permit any infiltration of water in any form that would have any adverse effect on the Owner's operations or the Project.

5.13.4. The Contractor shall, prior to Contract Completion and as a condition precedent to final payment to Contractor, assign to CMHA all manufacturer's warranties related to the materials and labor used in the Work and further agrees to perform the Work in such manner as to preserve any and all such manufacturer's warranties and deliver to the A/E the warranties, project manual, operating procedures, and other materials related to each of the building systems and materials included in the Contractor's Work and as required by the Specifications.

5.13.5. Upon notice of the breach of any of the warranties or guarantees identified herein, or any other warranties or guarantees under the Contract Documents, the Contractor, in addition to any other requirements in the Contract Documents, shall commence to correct such breach and all damage resulting therefrom within two (2) business days from written notice thereof, thereafter use its best efforts to correct such breach and damage to the satisfaction of CMHA and A/E, and, except when an extension of time is granted in writing by CMHA, correct such breach and damage to the satisfaction of CMHA within thirty (30) calendar days of such notice, or such other time as provided in the notice; provided, however, that if such notice is given after final payment the 2-day period shall be extended to seven (7) calendar days.

A. If the Contractor fails to commence to correct such breach and damage, or to correct such breach or damage as provided above, the Owner, without prejudice to any of its other rights or remedies at law or under the Contract Documents, may correct the breach without further notice to Contractor.

B. The Contractor shall pay the Owner's reasonable costs and expenses incurred in connection with the or related to such correction and/or breach, including without limitation the Owner's administrative, legal, and consulting expenses and additional service fees of the A/E.

C. The foregoing warranties and obligations of the Contractor shall survive final payment and/or termination of the Contract and shall not be limited by any other terms contained in the Contract Documents.

D. If the Contractor fails to pay the Owner any amounts due hereunder, the Contractor shall pay the Owner, in addition to the amounts due, a late payment fee of one and one-half percent (1.5%) per month for each month or part thereof that the payments are not paid when due.

5.13.6. Contractor shall bring to or store at the Site only the materials and equipment required for the Work.

A. If possible, materials and equipment should be installed in their final positions when brought to the Site.

5.13.7. All equipment, material, and articles furnished under this Contract shall be of the most suitable grade for the purpose intended, unless otherwise specifically provided in this Contract.

A. 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.

- B. The Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of, and as approved by CMHA in writing, is equal to that named in the specifications, unless otherwise specifically provided in this Contract so long as Contractor has submitted a substitution request to CMHA.
- C. If the substituted material has not been approved by CMHA in writing, the substituted material may be considered Defective Work by CMHA or A/E.

5.13.8. Approval of Equipment and materials

- A. The Contractor shall obtain CMHA's approval of the machinery and mechanical and other equipment to be incorporated into the work.
 - i. When requesting approval, the Contractor shall furnish to CMHA 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
 - ii. When required by this contract or by CMHA, the Contractor shall also obtain CMHA's approval of the material or articles which the Contractor contemplates incorporating into the work.
 - iii. When requesting approval, the Contractor shall provide full information concerning the material or articles.
 - iv. Machinery, equipment, material, and articles that do not have the required approval shall be installed or used at the risk of subsequent rejection.
- B. When required by the specifications or CMHA, the Contractor shall submit appropriately marked samples (and certificates related to them) for approval at the Contractor's expense, with all shipping charges prepaid.
 - i. 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.
- C. Certificates shall be submitted electronically in triplicate, describing each sample submitted for approval and certifying that the material, equipment or accessory complies with contract requirements.
 - i. The certificates shall include the name and brand of the product, name of manufacturer, and the location where produced.
- D. Approval of a sample shall not constitute a waiver of CMHA's right to demand full compliance with contract requirements.
 - i. Materials, equipment and accessories may be rejected for cause even though samples have been approved.
- E. 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.
 - i. CMHA may require laboratory test reports on items submitted for approval or may approve materials on the basis of data submitted in certificates with samples.
 - ii. Check tests will be made on materials delivered for use only as frequently as CMHA determines necessary to insure compliance of materials with the specifications.
 - iii. 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.
- F. After approval, samples will be kept in the Project office until completion of work.
 - i. They may be built into the work after a substantial quantity of the materials they represent has been built in and accepted.
- G. **Requirements concerning lead-based paint**
 - i. The Contractor shall comply with the requirements concerning lead-based paint contained in the Lead-Based Paint Poisoning Prevention Act.

5.13.9. Substitutions

- A. If the Contractor provides approved Substitutions that require changes to the Contract Documents, the Contractor shall be solely responsible for the additional costs incurred as a result, including without limitation changes to the design by the A/E.

- B. CMHA shall consider Requests for Substitutions after the bid opening only when the Contractor can conclusively demonstrate CMHA the following conditions:
 - i. The specified Basis of Design Components, Acceptable Components, or previously approved Substitutions through no fault of the Contractor are not available; or
 - ii. The specified Basis of Design Components, Acceptable Components, or previously approved Substitutions will not perform as designed or intended.
- C. The Contractor's incorporation of unapproved Substitutions in the Work shall constitute Defective Work.
- D. If the Contractor provides an unacceptable Component, the Contractor shall be solely responsible for the costs of coordination and modification required.

5.14. Specifications and Drawings for Construction

- 5.14.1.** The Contractor shall keep on the work site a stamped, permit set of the drawings and specifications and shall at all times give CMHA access thereto.
- A. 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.
 - B. In case of difference between drawings and specifications, the specifications shall govern.
 - C. In case of a discrepancy in the figures, in the drawings, or in the specifications, the matter shall be promptly submitted to CMHA, who shall promptly make a determination in writing.
 - D. Any adjustment by the Contractor without such determination shall be at its own risk and expenses.
 - E. CMHA shall furnish from time to time such detailed drawings and other information as considered necessary, unless otherwise provided.
- 5.14.2.** 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 CMHA is intended.
- 5.14.3.** Where "shown," indicated", "detailed", or words of similar import are used, it shall be understood that the reference is made to the drawings accompanying this Contract unless otherwise stated, the word "provided" as used herein shall be understood to mean "provide complete in one place" that is "furnished and installed".
- 5.14.4.** "Shop Drawings" means drawings, submitted to CMHA by the Contractor, subcontractor or any lower tier subcontractor, showing in detail, 1) the proposed fabrication and assembly of structural elements and 2) the installations (i.e., form, fit, and attachment details) of materials of equipment.
- A. 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.
 - B. CMHA may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this contract.
- 5.14.5.** 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.
- A. Shop Drawings submitted to the A/E without evidence of the Contractor's approval may be returned for resubmission.
 - B. CMHA will indicate an approval or disapproval of the shop drawings and if not approved as submitted shall indicate CMHA's reasons therefore.
 - C. Any Work done before such approval shall be at the Contractor's risk.
 - D. Approval by the A/E 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 approved variations.
- 5.14.6.** 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.
- A. If the A/E approves any such variation and CMHA concurs, CMHA 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.

5.14.7. It shall be the responsibility of the Contractor to make timely requests to CMHA for such large scale and full size drawings, color schemes, and other additional information, not already in possession, which shall be required in the planning and production of the work.

A. Such requests may be submitted as the need arises, but each such request shall be filed with ample time to permit appropriate action to be taken by all parties involved so as to avoid delay.

5.14.8. The Contractor shall electronically submit to CMHA for approval (unless otherwise indicated) all shop drawings as called for under the various headings of the specifications.

A. As required by CMHA, the Contractor, upon completing the work under this Contract, shall furnish a complete set of drawings as finally approved.

B. These drawings show all changes and revisions made up to the time the work is completed and accepted.

5.14.9. Specifications and Drawings for Construction shall be included in all Subcontracts at any tier.

A. It shall be the responsibility of the Contractor to ensure that all shop drawings prepared by Subcontractors are submitted to CMHA.

5.15. As Built Drawings

5.15.1. "As-built drawings," 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.

A. "As-built drawings" shall be synonymous with "Record Drawings".

5.15.2. As required by CMHA, the Contractor shall provide CMHA accurate information to be used in the preparation of permanent as-built drawings.

A. 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.

5.15.3. As Built Drawings shall be included in all subcontracts at any tier.

5.15.4. It shall be the responsibility of the Contractor to ensure that all As-Built Drawings prepared by Subcontractors are submitted to CMHA.

5.16. Project Document Maintenance and Submittal

A. During Construction

i. The Contractor shall maintain in good order at a secure location on the Site:

(a) A complete copy of all Contract Documents; Shop Drawings, Product Data, samples and similar required submittals; manufacturer operating and maintenance instructions; certificates; warranties; RFIs and responses thereto; and other Project-related documents, all marked currently and accurately to record field changes and selections made during construction and to show actual installation where installation varies from Work as originally shown, including the exact location and depth of underground utility lines; and

(b) A set of Drawings as approved by any applicable jurisdiction and Specifications.

B. Before submitting each Contract Payment Request, the Contractor shall record all changes on the Contract Documents, neatly in a contrasting color, noting new information not shown on the original Contract Documents.

i. Failure to record all changes may cause payment to be withheld or delayed by CMHA.

C. The Contractor shall keep a record of changes made to the Specifications, noting particularly any approved variation from manufacturer's installation instructions and recommendations.

D. If the Contractor uses Shop Drawings to indicate as-built conditions, the Contractor shall cross-reference the Shop Drawing sheet numbers to the corresponding sheet numbers on the Contract Documents.

i. The Contractor shall note related numbers where applicable.

5.16.2. Before Contract Completion

A. The Contractor, as a condition precedent to execution of the Certificate of Contract Completion and final payment, shall organize the As-Built Documents into manageable sets, bind the sets with durable paper cover sheets, and deliver the As-Built Documents to CMHA.

B. The Contractor's As-Built Documents submission shall include, but is not limited to:

- i. Certificate of Occupancy;
 - ii. Inspection certificates for pressure piping, elevator, boiler, electrical, plumbing or piping purification, etc.
 - iii. Letter of Approval from the local fire authority or State Fire Marshal for the fire suppression system;
 - iv. Operation and Maintenance Manuals, organized into suitable sets of manageable size;
 - v. Indexed data bound in individual binders, with pocket folders for folded sheet information and appropriate identification marked on the front and the spine of each binder;
 - vi. Neatly and accurately marked sets of As-Built Documents, and other Contract Documents reflecting the actual construction of the Project;
 - vii. Detailed Drawings reflecting the exact location of any concealed utilities, mechanical or electrical systems, and components;
 - viii. Assignment to CMHA of all warranties and guarantees, including the most-recent address and telephone number of any Subcontractors or manufacturers;
 - ix. An affidavit to certify that all Subcontractors have been paid in full for all Work performed or materials furnished for the Project;
 - x. A final lien waiver for both the Contractor and all Subcontractors of any tier;
 - xi. Final certified payroll reports; and
 - xii. An affidavit to certify that the Contractor and each of its Subcontractors, regardless of tier, have complied with all requirements of ORC.
- C. By submitting the As-Built Documents to CMHA, the Contractor certifies that its As-Built Documents are complete, correct, and accurate.

5.17. Temporary Buildings and Transportation of Materials

- 5.17.1.** Temporary buildings (e.g., storage sheds, shops, offices, sanitary facilities) and utilities may be erected by the Contractor only with the approval of CMHA and shall be built with labor and materials furnished by the Contractor without expense to CMHA.
- A. 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.
 - B. With the written consent of CMHA, the buildings and utilities may be abandoned and need not be removed.
- 5.17.2.** The Contractor shall, as directed by CMHA, use only established roadways, or use temporary roadways constructed by the Contractor when and as authorized by CMHA.
- A. 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.
 - B. When it is necessary to cross curbs or sidewalks, the Contractor shall protect them from damage.
 - C. The Contractor shall repair or pay for the repair of any damaged curbs, sidewalks, or roads.

5.18. Facilities

- 5.18.1.** The Contractor shall provide and maintain in a clean condition:
- A. Suitable facilities, including temporary facilities, equipment, services, and enclosed storage for its use at the Site;
 - B. Adequate space, equipment, and furnishings to conduct progress meetings, and store approved documents and permits; and
 - C. Adequate sanitary facilities for use by all Persons at the Site.

5.19. Progress Cleaning

- 5.19.1.** The Contractor shall remove all waste materials, rubbish, and mud attributable to the Work in accordance with the Specifications, if applicable, and to an appropriate disposal location at, or near, the Site.
- 5.19.2.** The Contractor shall perform weekly broom cleaning of hard flooring surfaces in the area of the Work.
- 5.19.3.** The Contractor shall remove, at the end of each working day or more frequently, as appropriate, for the Project, all waste materials and rubbish from the disposal location at, or near, the Site.

- 5.19.4.** The Contractor shall remove, as appropriate for the Project or as the A/E or CMHA directs, any waste materials or rubbish from areas adjacent to the Project.
- 5.19.5.** The Contractor shall dispose of waste materials, rubbish, and construction debris in a lawful manner in approved recycling facilities or landfills and record of such disposal shall be available upon written request of CMHA.
- 5.19.6.** If the Contractor fails to clean up during the progress of the Work, CMHA may clean up on behalf of the Contractor and at the Contractor's expense.
- A.** If the Contractor fails to maintain the areas adjacent to the Project clean and free of waste materials and rubbish, CMHA may also direct the local jurisdiction responsible for the area to have the area cleaned to its satisfaction at the Contractor's expense.
- B.** CMHA may deduct the cleaning costs from payments then or thereafter due the Contractor.
- i.** If payments then or thereafter due the Contractor are not sufficient to cover those amounts, the Contractor shall immediately pay the amount of the insufficiency to CMHA.
- 5.19.7.** The Contractor shall remove excavated material and spoil to a suitable off-site location approved by CMHA.
- A.** If CMHA designates a location on its property for disposal or storage of clean topsoil and/or subsoil in the Contract Documents, the Contractor shall remove such materials to the designated location.
- 5.20. Use of Premises**
- 5.20.1.** The Contractor shall use corridors, stairs, and elevators as designated by CMHA and only during those times that are designated by CMHA.
- A.** The Contractor shall exercise extreme care to not exceed the carrying capacity of elevators or damage the cab interior in any way.
- 5.20.2.** Loitering or wandering through interior of buildings or exterior grounds outside the limits of the Work will not be permitted.
- 5.20.3.** The Contractor shall confine its apparatus, materials, and the operations of its workers to the limits indicated by law, ordinances, permits and the directions of CMHA.
- 5.20.4.** Unless expressly required or approved by CMHA, no signs or advertising of any kind will be permitted on or about the Site, except those appearing on trucks and trailers.
- 5.20.5. CMHA Use of Premises / Possession Prior to Completion**
- A.** CMHA shall have the right to take possession of or use any completed or partially completed part of the Work.
- i.** Before taking possession of or using any work, CMHA shall furnish the Contractor a list of items of Work remaining to be performed or corrected on those portions of the Work that CMHA intends to take possession of or use.
- ii.** However, failure of CMHA to list any item of work shall not relieve the Contractor of responsibility for complying with the terms of the Contract.
- iii.** CMHA's possession or use shall not be deemed acceptance of Work under the Contract.
- B.** While CMHA has such possession or use, the Contractor shall be relieved of the responsibility for:
- i.** The loss of or damage to the Work resulting from CMHA's possession or use, notwithstanding the terms herein;
- ii.** All maintenance costs on the areas occupied; and
- iii.** Furnishing heat, light, power, and water used in the areas occupied without proper remuneration therefore.
- C.** If requested by the Contractor and if prior possession or use by CMHA delays the progress of the Work or causes additional expense to the Contractor, an equitable adjustment shall be made in the Contract Sum, the Contract Time, or both, and the Contract shall be modified in writing accordingly.

5.21. Smoking and Tobacco Products

- 5.21.1.** Smoking is not permitted at any property under construction, unless CMHA has a specifically designated area for smoking, and is not permitted within 50 feet of any entrance of a CMHA owned building.
- A.** This prohibition applies to new construction and rehabilitation.

- B. The Contractor shall enforce these restrictions on any individual employed by the Contractor, or a Subcontractor.

5.22. Correction of the Work

5.22.1. Before Substantial Completion

- A. If the Contractor provides Defective Work or fails or neglects to perform the Work in accordance with the Construction Progress Schedule, CMHA or the A/E may issue a written notice to the Contractor and Contractor's Surety directing the Contractor to correct the Defective Work or recover schedule deficiencies.
 - i. Unless otherwise specified in that written notice, the Contractor shall begin to correct the Defective Work and recover the schedule deficiencies within no more than three (3) business days after CMHA issues the written notice.
- B. If the Contractor fails to commence and diligently pursue correction of Defective Work or recovery of schedule deficiencies within three (3) business days of Contractor's receipt of written notice from CMHA or the A/E, CMHA may correct the Defective Work or take action to recover schedule deficiencies without giving further notice to the Contractor or Contractor's Surety.

5.22.2. During the Correction Period

- A. If CMHA issues a notice during the Correction Period, CMHA may correct the Defective Work itself without giving further notice to the Contractor or Contractor's Surety if the Contractor fails to:
 - i. Notify CMHA in writing of the Contractor's intent to correct the Defective Work within three (3) business days after CMHA issues the notice; and
 - ii. Thereafter promptly commence and diligently pursue correction of Defective Work.
- B. *The Correction Period:*
 - i. Commences in accordance with 23.1.41;
 - ii. Relates only to the Contractor's specific obligation and opportunity to correct the Work during the Correction Period;
 - iii. Does not establish a period of limitation with respect to any of the Contractor's other obligations under the Contract Documents;
 - iv. Has no relationship to the time within which CMHA may seek to enforce the Contract; and
 - v. Does not establish a period of limitation with respect to the commencement of litigation to establish the Contractor's liability under the Contract or otherwise.
- C. *After the Correction Period:*
 - i. CMHA may correct, at the Contractor's expense, the Defective Work without giving further notice to the Contractor or Contractor's Surety if the Contractor or Contractor's surety fails to
 - (a) Notify CMHA in writing of the intent to correct the Defective Work; and
 - (b) Promptly commence and diligently pursue correction of Defective Work.

5.22.3. After Substantial Completion

- A. In addition to the Contractor's other obligations under the Contract Documents, if any of the Work is found to be Defective Work after Substantial Completion, the Contractor shall correct it promptly after receipt of written notice from CMHA to do so, unless CMHA has previously acknowledged and accepted the Defective Work in writing.
- B. CMHA may send a copy of the written notice to the Contractor's Surety, but are not obligated to do so.

5.22.4. Emergency Correction of Defective Work

- A. Notwithstanding any other provision of the Contract, if in CMHA's opinion the Defective Work presents a threat of imminent harm or danger to people, property, or the environment, CMHA may order the Contractor to immediately correct Defective Work or CMHA may correct the Defective Work, at Contractor's expense, itself without any prior notice to the Contractor or Contractor's Surety.

5.22.5. Responsibility for Costs of Correction

- A.** To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify, defend and hold harmless CMHA, from and against all claims, (whether alleged or proven), demands, costs, losses, and damages, including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs, associated with the correction of Defective Work and the recovery of schedule deficiencies.
- B.** Those costs and damages may include, but are not limited to:
 - i.** The related fees and charges of contractors, engineers, architects, attorneys, and other professionals; and
 - ii.** The cost of correcting or replacing adjacent work.
- C.** CMHA may deduct those costs and damages from payments then or thereafter due the Contractor.
 - i.** If payments then or thereafter due the Contractor are not sufficient to cover those amounts, the Contractor shall immediately pay the amount of the insufficiency to CMHA.

6. ARTICLE VI SUBCONTRACTORS

6.1. Evaluation and Approval

- 6.1.1.** When submitting its Bid, the Contractor shall submit a Subcontractor and Material Supplier Declaration form through which the Contractor identifies its Subcontractor.
 - A.** Provide list of subcontractors and material supplier and equipment with bid.
- 6.1.2.** Within ten (10) calendar days after the Notice to Proceed, the Contractor shall submit to CMHA, an **updated** Subcontractor and Material Supplier Declaration form.
- 6.1.3.** If CMHA rejects any proposed Subcontractor, the Contractor shall propose a replacement Subcontractor with no adjustment of the Contract Sum.
 - A.** The proposed replacement will also be evaluated by CMHA.
- 6.1.4.** The Contractor's failure to timely submit the information regarding a proposed Subcontractor may result in withholding payment to Contractor.

6.2. Suspension/Debarment

- 6.2.1.** 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 program by any agency of the United States Government or the State of Ohio.

6.3. Contractor's Responsibility

- 6.3.1.** 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, and is responsible for scheduling and coordinating the Work of the Subcontractors.
- 6.3.2.** The Contractor is fully responsible for any delay, interference, disruption, or hindrance attributable to the Contractor's Subcontractors.
- 6.3.3.** The Contractors shall require that each of its Subcontractors have a competent supervisor at the Site whenever the Subcontractor is performing Work.
- 6.3.4.** The Contractor shall bind its Subcontractors to the terms and conditions of the Contract Documents, so far as applicable to the Work of the Subcontractor, and shall not agree to any provision, which seeks to bind CMHA with terms inconsistent with or at variance from the Contract Documents.
- 6.3.5.** The Contractor will not be relieved of its full responsibility for Subcontractors and their performance of the Work by:
 - A.** The participation of CMHA, HUD, or the A/E in the processes described under ARTICLE VI SUBCONTRACTORS or other related provisions of the Contract Documents; or
 - B.** CMHA's rejection of a Subcontractor or failure to reject a Subcontractor.

6.4. Mandatory Contract Provisions/Forms

- 6.4.1.** 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 in the work of Subcontractors.
- 6.4.2.** CMHA reserves the right to reassign accepted agreements
- 6.4.3.** Nothing contained in this Contract shall create any contractual relationship between any Subcontractor and CMHA or between the Subcontractor and HUD.
- 6.4.4.** The Contractor must include in the contract with its Subcontractors the applicable labor provisions and prevailing wages as was provided to the Contractor by CMHA.
- 6.4.5.** No less than ten (10) calendar days before the Work is to be performed by a Subcontractor, or within a shorter period as mutually agreed by the Contractor and CMHA, the Contractor shall submit to CMHA a complete copy of the executed Subcontract between the Contractor and Subcontractor.

6.5. Replacement of Subcontractors

- 6.5.1.** The Contractor shall not replace any Subcontractor after execution of the Subcontract without prior written approval of CMHA.
- 6.5.2.** The Contractor shall not add any subcontractors after the Contract Execution without updating the Material supplier and subcontractor form or prior to written approval of CMHA.

6.6. Contingent Assignment of Subcontract

6.6.1. The Contractor hereby assigns its Agreement with each Subcontractor to CMHA provided that the assignment is effective only after termination of the Contract by CMHA and only for those agreements that CMHA accepts by notifying Contractor and applicable Subcontractor in writing.

6.7. Prompt Payment of Subcontracts

6.7.1. The Contractor shall make payments to the Subcontractor in accordance with Applicable Law, including ORC that include, without limitation, the requirements under 6.7 - Prompt Payment of Subcontracts.

6.7.2. If a Subcontractor requests payment in time to allow the Contractor to include the request in its Contractor Payment Application Request the Contractor, within ten (10) calendar days after receipt of payment from CMHA, shall pay to the:

- A.** Subcontractor, an amount equal to the percentage of completion of the Subcontractors contract allowed by CMHA for the amount of labor or work performed;
- B.** Material Supplier, an amount that is equal to all or a portion of the invoice for materials which represents the materials furnished by the material supplier

6.7.3. The Contractor may reduce the amount paid by any retainage provision contained in the Contract, invoice, or purchase order between the Contractor and Subcontractor and may withhold amounts that may be necessary to:

- A.** Resolve disputed liens or claims involving the Work or labor performed by the Subcontractor; or
- B.** Account for failure of the Subcontractor to perform its obligations under its agreement with the Contractor required under ORC

6.7.4. Labor Payments

A. Within ten (10) calendar days of receipt of payment from CMHA, the Contractor shall pay Subcontractor in the following manner:

- i.** Partial payments to the Subcontractor for labor performed under either a Unit Price or lump sum Subcontract shall be made at the rate of 92 percent of the amount invoiced through the Subcontractor's request for payment that shows the Work of the Subcontractor is 50% complete.
- ii.** After the Work of the Subcontractor is 50 percent complete, as evidenced by payments of at least 50 percent of the total amount due under the Subcontract, no additional funds shall be retained from payments for labor.

6.7.5. Material Payment

A. Required by ORC for payment to Contractor by CMHA

- i.** The Contractor shall pay the Subcontractor at the rate of 95% of the invoice cost, not to exceed the scheduled value in a unit price or lump sum Subcontract, for materials delivered to the Site, or other offsite storage location approved by CMHA, provided the Subcontractor provides the information required with its request for payment.
- ii.** The Contractor shall pay the Subcontractor at the rate of 100% of the scheduled value for materials incorporated into the Project.

6.7.6. If Contractor fails to comply with the payment provisions set forth, the Contractor shall pay to the applicable Subcontractor, in addition to any payment due, interest in the amount of 18 percent per annum of the payment due, beginning the eleventh day following the receipt of payment from CMHA and ending on the date of full payment of the payment due plus interest.

6.7.7. If CMHA receives a Claim Affidavit from a Subcontractor, Subcontractor shall proceed in accordance with Applicable Law, including Ohio Revised Code.

6.7.8. Laborers, Subcontractors, and Material Suppliers may secure payment rights in accordance with Applicable Law, including Ohio Revised Code.

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

6.8.1. 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 solicitations lists;

- B.** Ensuring that small and minority businesses and women's business enterprises are solicited whenever they are potential resources
- 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;
- 6.8.2.** Establishing delivery schedule, where the requirements of the Contract permit, which encourages participation by small and minority businesses and women's business enterprises; and
- 6.8.3.** 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

7. ARTICLE VII PAYMENTS

7.1. CMHA Obligation

7.1.1. CMHA shall pay the Contractor the price as provided in the Contract.

7.2. Forms

7.2.1. Unless expressly authorized to the contrary, Contractor must use appropriate CMHA forms.

7.3. Step One – Pencil Application

7.3.1. The purpose of a pencil application is assisting the Contractor in identifying any potential error or omission in the pay application.

A. If submitted timely (as set forth below) CMHA will review and help identify any potential issues. However, the CMHA Construction Administrator's approval or suggestion does not guarantee approval of the payment application by the CMHA.

7.3.2. The Contractor shall initially submit a Pencil Application by no later than the 15th of each month.

A. The CMHA Construction Administrator will review the Pencil Application, and make any suggested corrections and return to the Contractor in approximately two (2) business days.

7.3.3. The Contractor shall then submit the final payment application to the CMHA Construction Administrator by the 23rd of each month.

7.3.4. Failure to submit a pencil application may result in a significant delay in payment.

7.4. Progress Payments

7.4.1. CMHA shall make progress payments approximately every forty-five (45) calendar days as the work proceeds on estimates of Work accomplished which meets the standards of quality established under the Contract, as approved by CMHA.

A. Subject to CMHA's written determination and approval more frequent payments may be made to contractors which are qualified as small businesses.

7.4.2. Before the first progress payment under this contract, the Contractor shall furnish, in such detail as requested by CMHA, 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.

A. The breakdown shall be approved by CMHA and must be acceptable to HUD.

B. If the contract covers more than one Project, the Contractor shall furnish a separate breakdown for each.

C. 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 Sum.

D. The Contractor shall prorate its overhead and profit over the construction period of the Contract.

7.4.3. The Contractor shall submit, on forms provided by CMHA, periodic estimates showing the value of the work performed during each period based upon the approved breakdown of the Contract Sum.

A. Such estimates shall be submitted not later than nine (9) calendar days in advance of the date set for payment and are subject to correction and revision as required.

B. The estimates must be approved by the CMHA prior to payment.

C. If the contract covers more than one project, the Contractor shall furnish a separate progress payment estimate for each.

D. Each payment application should include affidavits for the Contractor, Sub Contractors and Material Suppliers. Lien waivers should be submitted as proof of payment for the prior payment application affidavits.

7.4.4. Along with each request for progress payments and the required estimates, the Contractor shall furnish the following certification, or payment shall not be made:

A. I hereby certify, to the best of my knowledge and belief, that:

i. The amounts requested are only for performance in accordance with the specifications, terms,

ii. 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

- iii. 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.

7.5. Allowances

- 7.5.1. The Contract Sum includes the Allowances (if any) identified in the Contract.
- 7.5.2. All allowances include the costs to the Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes.

7.6. Unit Prices

- 7.6.1. Where the Contract provides that all or a part of the Work is to be Unit Price Work, initially that Contract Sum will include for all Unit Price Work:
 - A. An amount equal to the sum of the established Unit Prices for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Contract.
 - B. The Contractor's fee on that Unit Price Work.
- 7.6.2. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Sum.
 - A. CMHA will determine the actual quantities and classifications of Unit Price Work performed by the Contractor.
- 7.6.3. Before final payment, an appropriate Change Order will be issued to reconcile the Contract Sum so that it reflects actual amount due to the Contractor on account of Unit Price Work actually performed.

7.7. Schedule of Values

- 7.7.1. Within seven (7) calendar days after issuance of Letter of Intent or other period as mutually agreed by the Contractor and CMHA, the Contractor shall submit to CMHA a Schedule of Values on a form provided for by CMHA, with separate amounts shown for labor and materials for each branch of Work.
 - A. The Contractor shall clearly indicate on the Schedule of Values, but is not necessarily limited to, the cost of payment and performance bond(s), permit costs, the amount(s) allocated, including separate items for the Contractor's Fee (Overhead and Profit), and the amount(s) of labor and materials, as appropriate.
- 7.7.2. The grand total shown on the Schedule of Values shall equal the total Contract Sum.
- 7.7.3. CMHA may use the approved Schedule of Values to determine cost or credit to CMHA resulting from any change in the Work.
 - A. The first items shall be a breakdown of the General Conditions Cost.
 - B. The amounts for labor and materials shall accurately reflect the cost for each item.
 - i. The Contractor shall clearly indicate on the Schedule of Values, the amount(s) allocated, including separate items for Contractor's Fee (overhead and profit), for each Section 3 certified Business used in the performance of the Work.
 - ii. Contractor's Fee shall be included in the totals for labor and materials.
 - C. If the material allocation exceeds 55 percent of the Contract Sum, the Contractor shall provide, upon request, sufficient information to support the higher percentage.
 - D. Subcontract Work shall show amounts for labor and materials.
 - i. Fringe benefits shall be shown as a part of labor costs.
 - E. When more than one major structure is included in the Work, the Contractor shall subdivide the Schedule of Values accordingly, with cost details for each structure shown separately.
 - F. The line items shall be coordinated with line items in the Construction Progress Schedule, which may require division of items of Work by area of the Project by floor, phase, or other appropriate area.
 - G. Mechanical and electrical Work shall be included in separate line items for all major pieces of equipment, and group smaller equipment items by type.
 - H. Line items shall be included for each Allowance, Punch List Work, Project Record Document Submittals, delivery of attic stock, and specified demonstrations and training.
- 7.7.4. CMHA may return the Schedule of Values to the Contractor for re-submittal if it does not meet the requirements or contains insufficient items or details of the Work, or approve the Schedule of Values if CMHA determines that it conforms to section 7.7
- 7.7.5. No payment shall be made until the CMHA has approved the Contractor's Schedule of Values.

7.8. Labor Payments/Retainage

- 7.8.1.** Partial payments to the Contractor for labor performed under either a Unit Price or lump sum Contract shall be made at the rate of 90 percent of the amount invoiced through the Contractor Payment Request.

7.9. Material Payments/Retainage

- 7.9.1.** CMHA shall pay the Contractor at the rate of 100 percent of the scheduled value for materials incorporated into the Project.
- 7.9.2.** CMHA shall pay the Contractor at the rate of 90 percent of the invoice cost, not to exceed the scheduled value in a Unit Price or lump sum Contract, for materials delivered to the Site, or other off-Site storage location approved by CMHA provided the Contractor provides the following information with the Contractor Payment Request:
- A.** A list of the fabricated materials consigned to the Project, giving the place of storage, together with copies of invoices, in order to verify quantity and cost; and
 - B.** A certification of materials stored off-site, prepared by the Contractor and signed by CMHA to evidence that the materials are in conformity with the Specifications and have been tagged with the Project name and number for delivery to the Project.
- 7.9.3.** CMHA shall pay the balance of the scheduled value when the materials are incorporated into and become a part of the Project.
- 7.9.4.** When payment is allowed for materials delivered to the Site or other approved off-site storage location but not yet incorporated into the Project, the materials are the property of CMHA.
- 7.9.5.** CMHA may, at its sole discretion, retain any material not ultimately incorporated into the Project or return it to the Contractor for credit of an amount proportionate to the value of the extra materials.
- 7.9.6. Release of Retainage**
- A.** When the Contractor has achieved Substantial Completion of all Work, and there is no other reason to retain funds; upon request of the Contractor, the funds retained in connection with that Work shall be released and paid to the Contractor, withholding only that amount necessary to assure faithful completion in the sole discretion of CMHA, including but not limited to compliance with CLOSEOUT.

7.10. Payments Withheld

- 7.10.1.** CMHA may withhold funds from or may assess Liquidated Damages against a Contractor Payment Request.
- 7.10.2.** CMHA may decline to approve any Contractor Payment Request or part thereof, or nullify any previous Contractor Payment Request, in whole or in part, to the extent necessary in CMHA's sole opinion to protect CMHA from loss because of:
- A.** Defective Work not remedied;
 - B.** Overpayment of any schedule of values line item without prior approval of related change order by Contracting Officer;
 - C.** Overpayment due to calculation error;
 - D.** Damage caused by the Contractor;
 - E.** Reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
 - F.** Reasonable evidence that the Work will not be completed within the Contract Times, and that the unpaid balance would not be adequate to cover damages under the Contract Documents for the anticipated delay;
 - G.** Failure to comply with Applicable Law including, but not limited to, the requirements of ORC.

7.11. Payment Request

- 7.11.1.** The Contractor and each of its Subcontractors, regardless of tier, shall execute a Payment Release Affidavit to certify that the Contractor and each of its Subcontractors, regardless of tier, have complied with all applicable requirements of ORC, and to certify that all of its Subcontractors have been paid in full for all Work performed or materials furnished under the Contract.
- 7.11.2.** CMHA shall pay Contractor in approximately forty-five (45) calendar days from the date of acceptance of the Payment Request.

- 7.11.3.** The Contractor, as a condition precedent to final payment, shall complete all requirements of the Contract Documents.
- 7.11.4.** Acceptance of final payment by the Contractor or a Subcontractor constitutes the payee's waiver of all claims against CMHA except those previously made in writing and identified by that payee as unsettled at the time of the final Contractor Payment Request.

8. ARTICLE VIII CONTRACT MODIFICATIONS

8.1.Changes in the Work

- 8.1.1.** Except as provided, no order, statement or conduct of CMHA shall be treated as a change or entitle the Contractor to an equitable adjustment.
- 8.1.2.** Only CMHA's Contracting Officer has authority to modify any term or condition of this Contract.
 - A.** Any Contract modification shall be authorized in writing.
- 8.1.3.** The Contracting Officer may modify the contract unilaterally:
 - A.** Pursuant to a specific authorization stated in a Contract clause; or
 - B.** For administrative matters which do not change the rights or responsibilities of the parties.
- 8.1.4.** All other Contract Modifications shall be in the form of supplemental agreements signed by the Contractor and CMHA.
 - A.** If notice of any change affecting the Contract is required by the provision of any Bond, notice is the Contractor's responsibility.
- 8.1.5.** Except as expressly stated herein, the Contractor's failure to obtain prior written authorization from CMHA for a change in the Work constitutes a waiver by the Contractor of an adjustment to the Contract Sum or Contract Time or both.
- 8.1.6.** The Contractor shall perform all changes in the Work under applicable provisions of the Contract Documents, and the Contractor shall proceed promptly with the change unless otherwise provided in the Change Order or order for a minor change in the Work.
- 8.1.7. HUD Approval**
 - A.** When a proposed modification requires the approval of HUD prior to its issuance; such modification shall not be effective until the required approval is received by CMHA.

8.2.Change Order

- 8.2.1.** CMHA may order changes in the Work without invalidating the Contract and such change in Work may be accomplished, by Change Order or an order for a minor change in the Work.
- 8.2.2.** CMHA 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, but not limited to, changes:
 - A.** In the specifications (including drawings and designs);
 - B.** In the method or manner of performance of the Work;
 - C.** CMHA-furnished facilities, equipment, materials, services, or site; or
 - D.** Directing the acceleration of the Work.
- 8.2.3.** If any change 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, CMHA shall make an equitable adjustment and modify the Contract in writing.
 - A.** However, except for an adjustment based on defective specifications, no proposal for any change shall be allowed for any costs incurred more than twenty (20) calendar days before the Contractor gives written notice as required.
 - B.** In the case of defective specifications for which CMHA is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with the defective specification.
- 8.2.4.** The Contractor must assert its right to an adjustment within thirty (30) calendar days after:
 - A.** Receipt of a written change order, or
 - B.** The furnishing of a written notice by submitting a written statement describing the general nature and the amount of the proposal.
- 8.2.5.** If the facts justify it, CMHA may, in its sole discretion, extend the period for submission.

8.3.Change Order Directive

- 8.3.1.** A Change Order Directive is a written order prepared by CMHA directing a change in the Work and may, if necessary, state a proposed basis for adjustment, if any, of Contract Sum or Contract Time, or both.
- 8.3.2.** A Change Directive shall be used to direct a change in the Work in the absence of a total agreement on the terms of a Change Order and shall only be used in the absence of total agreement on the terms of a Change Order concerning the associated change of the Work.

8.3.3. Upon receipt of a Change Directive, the Contractor shall promptly proceed with the change in the Work involved.

8.3.4. Within fourteen (14) calendar days after receiving the Change Directive, the Contractor shall respond with a Change Order Proposal for adjustment of the Contract Sum or Contract Time or both.

8.3.5. If the Contractor does not respond to the Change Directive as required above, CMHA shall determine the adjustments, if any, of the Contract Sum and Contract Times.

A. If the Contractor does not agree with CMHA's determination, the Contractor shall initiate a claim within ten (10) calendar days of the date on which CMHA issues the determination, and the Contractor's failure to do so shall constitute an irrevocable waiver the Claim.

8.3.6. If CMHA and the Contractor agree on the adjustment of the Contract Sum and/or Contract Time associated with the Change Order Directive, CMHA shall prepare an appropriate Change Order.

8.4. Change Order Procedure

8.4.1. Any Change Order Request must be in writing and submitted by the Contractor to CMHA in accordance with the Notice Provision.

8.4.2. The Contractor's cost of preparing and providing Proposals is included in the Contract Sum.

8.4.3. If CMHA Agrees with Change Order Proposal:

A. CMHA shall prepare each Change Order, attach the supporting documentation, and issue the Change Order to the Contractor for signature.

B. Within three (3) business days after issuance of Change Order to Contractor, Contractor must sign the Change Order and resubmit to CMHA.

C. Change Order is not approved until CMHA's Contracting Officer signs the Change Order.

8.4.4. If CMHA disagrees with Change Order Proposal or Contracting Officer doesn't Approve Change Order:

A. CMHA will notify Contractor in writing with reasons; and

B. Contractor has fourteen (14) calendar days to modify the Change Order Request or invoke ARTICLE XI DISPUTE RESOLUTION/CLAIM PROCEDURE.

8.4.5. Failure to reach an agreement on any proposal shall be a dispute under ARTICLE XI DISPUTE RESOLUTION/CLAIM PROCEDURE herein.

A. Nothing in Change Order Procedure, however, shall excuse the Contractor from proceeding with the contract change pursuant to an issued Change Directive.

8.5. Change Order Proposal

8.5.1. 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:

A. Direct Costs:

i. Materials (list individual items, the quantity and unit cost of each, and the aggregate cost)

ii. Transportation and delivery costs associated with materials

iii. Labor breakdowns by hours or unit costs (identified with specific Work to be performed)

iv. Construction equipment exclusively necessary for the change

v. Costs of preparation and/ or revision to shop drawings resulting from the change

vi. Worker's Compensation and Public Liability Insurance

vii. Employment taxes under FICA and FUTA

viii. Bond Costs

B. Indirect Costs:

i. Indirect costs may include overhead, general and administrative expenses, and fringe benefits not normally treated as direct costs.

C. Profit:

i. The amount of profit shall be negotiated and may vary according to the nature, extent, and complexity of the work required by the change.

ii. The allow-ability of the direct and indirect costs shall be determined in accordance with the Contract Cost Principles and Procedures for Commercial Firms, in effect on the date of this Contract.

iii. The Contractor shall not be allowed a profit on the profit received by any subcontractor.

- iv. Equitable adjustments for deleted work shall include a credit for profit and may include a credit for indirect costs.
- v. 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.

8.5.2. 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.

8.5.3. CMHA shall act on proposals within thirty (30) calendar days after their receipt, or notify the Contractor of the date such action will be taken.

8.5.4. By signing a Change Order, the Contractor irrevocably certifies that the elements of a Change Order described herein are completely satisfied, and waives all rights, if any, to seek further adjustment of the Contract Sum or Contract Times, or both, at a later date with respect to the associated change in the Work, including without limitation on account of the “cumulative impact” of the associated change in the Work in combination with in one or more of the other changes in the Work.

8.5.5. No Proposal by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this Contract.

Except in an emergency endangering life or property, no change shall be made by the Contractor without a prior written authorization from CMHA’s Contracting Officer. When the Change Order is signed by the Contractor and CMHA’s Contracting Officer, the fully executed Change Order modifies the Contract Documents and authorizes and directs the Contractor to proceed, and the Contractor shall promptly proceed with the associated change in the Work.

8.6. Differing Site Conditions

8.6.1. The Contractor shall promptly, and before the conditions are disturbed, give a written notice to CMHA of:

- A. Subsurface or latent physical conditions at the site which differ from those indicated in this contract; or
- B. 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.

i. Written notice of the condition shall be given immediately to CMHA.

- C. The Contractor’s failure to give notice of the Differing Site Condition as required shall constitute an irrevocable waiver of any associated claim.

8.6.2. CMHA shall investigate the site conditions promptly after receiving the notice.

- A. 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.
- B. If the conditions do materially so differ and cause an increase or decrease in 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 CMHA within ten (10) calendar days after receipt of such instructions and, in any event, before proceeding with the work.
- C. An equitable adjustment in the Contract price, the delivery schedule, or both shall be made under this.

8.6.3. No request by Contractor for an equitable adjustment to the Contract under Differing Site Conditions shall be allowed, unless the Contractor has given the written notice required; provided that the time prescribed for giving written notice may be extended by CMHA.

8.6.4. If CMHA determines that the Contractor has not encountered a Differing Site Condition and the Contractor does not agree with that determination, the Contractor must initiate a Claim within ten (10) calendar days of the date that CMHA issues its determination.

8.7. Minor Changes in the Work

8.7.1. CMHA may order minor changes in the Work not involving adjustment of the Contract Sum or extension of the Contract Times and not inconsistent with the intent of the Contract Documents.

- A. Those changes shall be effected by written order issued to the Contractor.

- 8.7.2.** The Contractor shall promptly carry out each order for a minor change in the Work if the Contractor agrees that the order does not involve adjustment of the Contract Sum and Contract Times.
- 8.7.3.** If the Contractor reasonably believes that it would be entitled to an adjustment of the Contract Sum or Contract Times, or both, on account of an order for a minor change in the Work, the Contractor, within three (3) business days after receiving the order, shall give CMHA written notice of the Contractor's position, and not proceed with the subject Work without first receiving a Change Order related to it.
- 8.7.4.** The Contractor waives its right to an adjustment of the Contract Sum or Contract Times on account of an order for a minor change in the Work by:
- A.** Starting the Work that is the subject of the order for a minor change in the Work; or
 - B.** Failing to give the notice described within three (3) business days after receiving the order for a minor change in the Work.

8.8. Change Order Cost or Credit Determination

8.8.1. General

- A.** The maximum cost or credit resulting from a change in the Work shall be determined as described below.
 - i.** Proposals shall include the information required.
 - ii.** A Unit Price Proposal shall only be valid when incorporated into the Contract by Change Order.
 - iii.** The maximum cost or credit includes all compensation for impact costs.
 - (a)** Additional costs for impacts shall not be allowed.
- B.** The Contractor shall not assign any portion of the Work to another Person whereby the Contractor would benefit directly or indirectly from the double application of charges for overhead or profit.
- C.** CMHA may require notarized invoices for material costs and may audit the records of the Contractor and Subcontractors.
- D.** For each change in the Work, the Contractor shall furnish a detailed Proposal itemized on the Proposal Worksheet Summary Form published by CMHA through which the Contractor shall document the related changes in the Contract Sum.
 - i.** Any Subcontractor pricing shall also be itemized on the Proposal Worksheet Summary Form.
- E.** Section 8.8.2 Pricing Criteria establishes the exclusive and maximum amount that CMHA shall pay for any Change Order, including, but not limited to, all amounts for interference with, delay, hindrance, disruption, or impact of the Work
 - i.** These Pricing Criteria also govern the value of deduct Change Orders and the Contractor's entitlement to additional compensation or damages through the Claims and dispute resolution processes on account of changes in the Work.
 - ii.** In order to expedite the review and approval process, Proposals shall be prepared in the categories and order listed in - Pricing Criteria.

8.8.2. Pricing Criteria

A. Contractor Personnel Costs

- i.** The Contractor's on-Site management (including supervision and administrative personnel) are not subject to State or Federal Prevailing Wage Rates.
- ii.** These costs will be calculated on an hourly basis according to the rates acceptable to CMHA.
- iii.** In no event will the Contractor be entitled to an increase in the Contract Sum on account of Contractor Personnel Costs unless the Contractor actually incurs additional Contractor Personnel Costs solely on account of the associated change in the Work.

B. Labor

- i.** Field labor directly involved in the Work based upon the actual rate of pay to the worker.
- ii.** If the Project is subject to payment of prevailing wage rates, field labor shall be paid according to the applicable classification of labor as established in the applicable prevailing wage determination.
- iii.** In no event will the Contractor be entitled to an increase in the Contract Sum on account of labor costs unless the Contractor actually incurs additional labor costs solely on account of the associated change in the Work.

- iv. Under no conditions will the increase exceed those additional labor costs the Contractor actually incurs.
- v. The cost for supervision above the level of working forepersons (such as general forepersons, superintendent, project manager, etc.) is included in the adjustment **Contractor** Personnel Costs.

C. Fringes

- i. Fringe benefit credit for labor is only allowable for prevailing wage fringe benefits including, but not limited to, Health and Welfare, vacation, apprenticeship training, and certain types of pension plans.
- ii. Each fringe benefit for which credit is requested shall be calculated on an hourly basis and listed as a separate line item.
- iii. The Contractor shall submit documentation supporting the calculation of the amounts for each fringe benefit for each worker classification, including labor provided by Subcontractors.

D. Allowable Payroll Expenses

- i. Allowable payroll expenses for labor including payroll taxes as well as other benefits that are required by Applicable Law, shall each be a separate line item.

E. Equipment Rentals

- i. All charges for certain non-owned heavy or specialized equipment at up to 100 percent of the documented rental cost
- ii. No rental charges shall be allowed for hand tools, minor equipment, simple scaffolds, etc. Downtime due to repairs, maintenance and weather delays shall not be allowed.
- iii. Contractor shall submit copies of actual paid invoices to substantiate rental costs.

F. Owned Equipment

- i. All charges for certain heavy or specialized equipment owned by the Contractor or Subcontractor performing the Work at up to 100 percent of the cost listed by the current edition of the Associated Equipment Distributors' *AED Green Book* heavy equipment rental rates.
- ii. No recovery shall be allowed for hand tools, minor equipment, simple scaffolds, etc.
- iii. The longest period of time that the equipment is to be required for the Work shall be the basis for the pricing.
- iv. Downtime due to repairs, maintenance, and weather delays shall not be allowed.

G. Trucking

- i. A reasonable delivery charge or per-mile trucking charge for delivery of required materials or equipment
- ii. Charges for use of a pick-up truck shall not be allowed.

H. Materials

- i. The actual cost (including all discounts, rebates or related credits) of all materials incorporated into the changed Work
- ii. Documentation shall show costs, quantities, or Unit Prices of all items, as appropriate.
- iii. The cost or credit for reusable materials shall be limited to 33 percent of the material cost for each use.

I. Contractor's General Conditions Costs

- i. The Contractor's General Conditions Costs to the extent attributable to an associated change in the Contract Time for achievement of Final Acceptance resulting from the change in Work
- ii. In no event shall the Contract Sum adjustment per day of Contract Time adjustment exceed an amount equal to **(1)** the sum of the General Conditions Costs line items in the Contractor's Schedule of Values approved by CMHA, **(2)** divided by the total number of days of the original Contract Time for achievement of Final Acceptance.
- iii. The Contractor shall:
 - (a)** Exclude the bond premium from the Schedule of Values for the purposes of the calculation; and
 - (b)** Include the actual adjustment of the Bond Premium attributable to an associated change in the Contract Sum.
- iv. If the Contractor purchases Builder's Risk insurance for the Project, the Contract shall:

- (a) Exclude the Builder's Risk insurance premium from the Schedule of Values for the purposes of the calculation; and
- (b) Include the actual adjustment of the Builder's Risk insurance premium attributable to an associated change in the Contract Sum.

J. Subcontractor Overhead and Profit

- i. Adjustment of the Contract Sum on account of a change in Subcontractor-performed Work shall include the Subcontractor's aggregate overhead and profit allowance equal to 15 percent of the sum of the Subcontractor's costs that are associated with that changed Work.
- ii. The allowance applies to each Subcontractor tier.
- iii. The allowance covers:
 - (a) The costs required to schedule and coordinate the Work
 - (b) Telephone
 - (c) Telephone charges
 - (d) Facsimile
 - (e) Telegrams
 - (f) Postage
 - (g) Photos
 - (h) Photocopying
 - (i) Hand tools
 - (j) Simple scaffolds (one level high)
 - (k) Tool breakage
 - (l) Tool repairs
 - (m) Tool replacement
 - (n) Tool blades
 - (o) Tool bits
 - (p) Home office estimating and expediting
 - (q) Home office clerical and accounting support
 - (r) Home office labor (management, supervision, engineering)
 - (s) All other home office expense, legal services, travel, and parking expenses
- iv. An exception is allowed for shop or engineering labor, which shall not be subject to Prevailing Wage rates for steel fabricators, sheet metal fabricators, and sprinkler system fabricators performing work off-site.
 - (a) Recovery for these matters shall be allowed on an hourly basis.
- v. An exception is allowed for field supervision labor, for those portions of the Change Order Work that will be performed, or was performed, at times when the superintendent is not required to be on site, including but not limited to overtime hours due to acceleration and\ extensions of the Contract Times.
 - (a) Recovery for this matter will be allowed on an hourly basis.

K. Contractor's Fee

- i. Adjustment of the Contract Sum on account of a change in the Work shall include an allowance for the Contractor's Fee equal to 10 percent of the sum of the costs that are associated with that changed Work.

L. Miscellaneous

- i. Adjustment of the Contract Sum on account of a change in Work may include the following costs with no allowance for Contractor's Fee or Subcontractor overhead and profit.
- ii. The premium portion only for approved overtime (labor and fringes)
- iii. The straight time portion is included.

8.8.3. Costs that shall not be reimbursed for Change Order Work include the following

- A. Voluntary employee deductions including, but not limited to, deductions for charitable donations or U.S. savings bonds
- B. Employee profit sharing

8.9. Time Extension

- 8.9.1.** Every adjustment of the Contract Times associated with any change in the Work shall be determined as provided herein, which establishes the Contractor's maximum entitlement for any change in the Work, including without limitation all adjustments for interference, delay, hindrance, or disruption of the Work.
- 8.9.2.** This also governs time adjustments for deduct Change Orders and the Contractor's entitlement to additional time through the claims and dispute resolution processes on account of changes in the Work.
- 8.9.3.** The Contractor shall substantiate all changes in the Contract Times with:
- A.** A written description of the nature of the interference, disruption, hindrance or delay;
 - B.** Identification of Persons and events responsible for the interference, disruption, hindrance or delay;
 - C.** Date, or anticipated date, of commencement of the interference, disruption, hindrance or delay;
 - D.** Identification of activities by schedule activity number and name on the Construction Progress Schedule, which may be affected by the interference, disruption, hindrance or delay, or new activities created by the interference, disruption, hindrance or delay and the relationship with existing activities;
 - E.** Anticipated duration of the interference, disruption, hindrance or delay and of any remobilization period;
 - F.** Specific number of days of extension requested and specific number of days for remobilization requested;
 - G.** Recommended action to avoid or minimize any future interference, disruption, hindrance or delay; and
 - H.** A detailed written proposal for an increase in the Contract Sum which would fully compensate the Contractor for all costs of acceleration of the Work needed to completely overcome the associated delay, if any.
- 8.9.4.** A Change Order may authorize extension of the Contract Time for specific elements, while maintaining milestone dates for unaffected elements.
- A.** Such a Change Order may also authorize an appropriate adjustment to Liquidated Damages.
- 8.9.5. Critical Path**
- A.** Time extensions shall depend upon the extent to which the Work on the critical path of the Construction Progress Schedule is affected.
- 8.9.6.** A Change Order granting a time extension may provide that the Contract Times shall be extended for only elements so interfered with, disrupted, hindered, or delayed and related remobilization and that shall not be altered and may further provide for adjustment of Liquidated Damages.

9. ARTICLE IX CONSTRUCTION CLOSEOUT

9.1. Final Cleaning

- 9.1.1.** Before requesting the Substantial Completion inspection of the Work, the Contractor shall clean the Site, remove waste materials and rubbish attributable to the Project, and restore the property to an acceptable condition so that upon Substantial Completion, the premises are ready for occupancy by CMHA.
- 9.1.2.** If the Contractor performs any Work after final cleaning, the Contractor shall clean the affected area as provided above so that upon Substantial Completion, the premises are ready for occupancy by CMHA.
- 9.1.3.** Final cleaning shall be done to the reasonable satisfaction of CMHA.

9.2. Inspection and Construction of the Work

- 9.2.1.** 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.
 - A.** All work is subject to CMHA inspection and test at all places and at all reasonable times before acceptance to ensure strict compliance with the terms of the Contract.
- 9.2.2.** CMHA inspections and tests are for the sole benefit of CMHA and do not:
 - A.** Relieve the Contractor of responsibility for providing adequate quality control measures;
 - B.** Relieve the Contractor of responsibility for loss or damage of the material before acceptance;
 - C.** Constitute or imply acceptance; or
 - D.** Affect the continuing rights of CMHA after acceptance of the completed work.
- 9.2.3.** The presence or absence of the CMHA 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.
 - A.** All instructions and approvals with respect to the work shall be given to the Contractor by CMHA.
- 9.2.4.** 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 CMHA.
 - A.** CMHA 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 re-inspection or retest necessary.
 - B.** CMHA 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.

9.3. Routine Inspections

- 9.3.1.** CMHA may conduct routine inspections of the construction Site on a daily basis.
- 9.3.2.** The Contractor shall, without charge, replace or correct Work found by CMHA not to conform to contract requirements, unless Contracting Officer decides that it is in its interest to accept the Work with an appropriate adjustment in Contract Sum.
 - A.** The Contractor shall promptly segregate and remove rejected material from the premises.
- 9.3.3.** If the Contractor does not promptly replace or correct rejected Work, CMHA may:
 - A.** By Contract or otherwise, replace or correct the Work and charge the cost to the Contractor; or
 - B.** Terminate for default the Contractor's right to proceed.
- 9.3.4.** If any work requiring inspection is covered up without approval of CMHA, it must, if requested by the Contracting Officer, be uncovered at the expense of the Contractor.
 - A.** If at any time before final acceptance of the entire work, CMHA 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.
 - B.** 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.
 - C.** 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.

9.4. Substantial Completion

9.4.1. Contractor's Punch List

- A.** When the Contractor considers the Work, or a designated portion thereof, Substantially Complete the Contractor shall inspect the Work and prepare a list of Defective Work and incomplete or unacceptable Work ("Contractor's Punch List").
- B.** The Contractor shall list all items of Work not in compliance with the Contract Documents, including items the Contractor is requesting to be deferred.
 - i.** The Contractor shall proceed to correct all items listed on the Contractor's Punch List and certify that the incomplete items listed on the Contractor's Punch List are to its knowledge an accurate and complete list by signing the Contractor's Punch List.
 - ii.** The Contractor's failure to include an item on the Contractor's Punch List shall not alter the Contractor's responsibility to complete the Work in accordance with the Contract Documents.
 - iii.** The Contractor shall submit the signed Contractor's Punch List to CMHA together with a request for a Substantial Completion inspection of the Work.

9.4.2. Substantial Completion Inspection

- A.** The Contractor shall notify CMHA, 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.
 - i.** If CMHA and/or the A/E determine that the state of preparedness is as represented, CMHA will promptly arrange for the inspection.
 - ii.** Unless otherwise specified in the Contract, CMHA shall accept, as soon as practicable after completion and inspection, all work required by the Contract or that portion of the Work that CMHA determines and designates can be accepted separately.
 - iii.** Acceptance shall be final and conclusive except for latent defects, fraud, gross mistakes amounting to fraud, or CMHA's right under any warranty or guarantee.
- B.** Within three (3) business days after receipt of the request for the Substantial Completion inspection of the Work, CMHA shall notify the Contractor of acceptance or rejection of the request, stating reasons for any rejection.
 - i.** Within seven (7) calendar days after its acceptance of the Contractor's request, CMHA and/or the A/E shall conduct the Substantial Completion inspection to determine whether the Work, or designated portion, is in conformity with the Contract Documents and Substantially Complete.
 - ii.** If CMHA and/or the A/E determines that the Work is Substantially Complete, within three (3) business days after the Substantial Completion inspection, CMHA and/or the A/E shall prepare a Certificate of Substantial Completion that shall establish the date of Substantial Completion and include a list of Defective, incomplete, or unacceptable Work ("CMHA's Punch List").
 - iii.** CMHA's Punch List shall include:
 - (a)** The items on the Contractor's Punch List that are not yet completed or corrected as of the date of the Substantial Completion inspection; and
 - (b)** Comments from CMHA regarding the Punch List and other issues related to the Project.
 - iv.** CMHA shall submit the Certificate of Substantial Completion to the Contractor for their written acceptance.
 - (a)** Upon their acceptance and consent of the Contractor's Surety, and subject to CMHA's right to withhold payment, CMHA shall release retainage.
 - v.** CMHA and/or the A/E's failure to include an item on CMHA's Punch List shall not alter the Contractor's responsibility to complete the Work in accordance with the Contract Documents.
 - vi.** If CMHA subsequently determines that the Work is not Substantially Complete, CMHA may request compensation for related expenses.
 - (a)** CMHA may deduct the additional expenses from payments then or thereafter due the Contractor.

- (b) If payments then or thereafter due the Contractor are not sufficient to cover those amounts, the Contractor shall immediately pay the amount of the insufficiency to CMHA. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify, defend and hold harmless CMHA, from and against all claims, (whether alleged or proven), demands, costs, losses, and damages, including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs, associated with the failure of the Contractor to timely and properly complete the Punch List items.

9.4.3. Completion of Punch List Items

- A. The Contractor shall complete all items on the CMHA's Punch List prior to date for Contract Completion.
- B. After completing all items on the CMHA's Punch List, the Contractor shall provide a written request for Final Inspection of the Work.
 - i. If Work on the Punch List cannot be timely completed, the Contractor shall submit a change order request MODIFICATIONS.
 - ii. Within three (3) business days after receipt of the request for the Final Inspection of the Work, CMHA and/or the A/E shall complete a Final Inspection of the Work for compliance with the Contract Documents.
 - iii. If multiple inspections of items on CMHA's Punch List are required due to the Contractor's failure to properly and timely complete them, the Contractor shall pay any additional costs incurred by the A/E and CMHA resulting from any attendant delay.
 - (a) CMHA may deduct those additional costs from payments then or thereafter due the Contractor.
 - (b) If payments then or thereafter due the Contractor are not sufficient to cover those amounts, the Contractor shall immediately pay the amount of the insufficiency to CMHA. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify, defend and hold harmless CMHA, from and against all claims, (whether alleged or proven), demands, costs, losses, and damages, including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs, related to multiple inspections by CMHA of items on the Punch List due to the Contractor's failure to properly and timely complete the Punch List.

9.5. Demonstration and Training, Operating Appurtenances

- 9.5.1. The Contractor, as a condition precedent to execution of the Certificate of Contract Completion and final payment, shall perform demonstration and training of CMHA's maintenance personnel as specified in the Contract Documents.
- 9.5.2. The Contractor, as a condition precedent to execution of the Certificate of Contract Completion and final payment, shall organize and submit operating appurtenances and loose items related to operation and maintenance of the completed Project to CMHA, including, but not limited to:
 - A. Keys to door and window hardware, panels, and other devices not directly provided to CMHA from the manufacturer;
 - B. Operating handles, levers, cranks, specialized wrenches or drivers, remote controls, and similar items; and
 - C. Extra materials (e.g., attic stock).

9.6. Acceptance of Defective Work

- 9.6.1. Defective Work may only be knowingly accept by CMHA in writing instead of CMHA requiring its removal or correction, in which case the Contract Sum must be equitably reduced to account for the reduction in benefit of the Work received by CMHA on account of the Defective Work.
 - A. CMHA may only accept Defective Work though a deduct Change Order that makes explicit reference to Acceptance of Defective Work
- 9.6.2. None of the following will constitute acceptance of Defective Work, a release of the Contractor's obligation to perform the Work in accordance with the Contract, or a waiver of any rights set forth in the Contract or otherwise provided by Applicable Law:

- A. Observations or inspections by CMHA or the A/E;
- B. The making of any payment;
- C. Substantial Completion or the issuance of a Certificate of Substantial Completion;
- D. Partial Occupancy and CMHA's use or occupancy of the Work or any part of it;
- E. Contract Completion or the issuance of a partial or final Certificate of Contract Completion;
- F. Any review or approval of a submittal;
- G. Any inspection, test, or approval by other Persons; or
- H. Any correction of Defective Work by CMHA.

9.7. Building Commissioning

- 9.7.1.** If the Project scope includes building commissioning, the Contractor shall participate in the Commissioning Process, as prescribed in the Contract Documents.
- 9.7.2.** The Contractor shall permit the A/E, CMHA, or a third-party Commissioning Agent ("CxA") if applicable, access to commission performance based equipment, fixtures, and/or systems (e.g., HVAC, fire protection, smoke evacuation, fume hoods, emergency power, etc.), prior to Substantial Completion.
- 9.7.3.** The A/E, CMHA, or CxA if applicable, shall promptly notify, in writing, the Contractor of any deficiency identified during the Commissioning Process.
- 9.7.4.** To facilitate the Commissioning Process, the Contractor shall submit 4 sets of Operation and Maintenance manuals for dynamic and engineered systems to CMHA and CxA, if applicable, for approval. This submission shall occur within 30 days of obtaining approval of all related Contractor submittals required by the Contract Documents.

9.8. Contract Completion

9.8.1. Partial Contract Completion

- A. When items of Work cannot be completed until a subsequent date, CMHA shall prepare a partial Certificate of Contract Completion that shall include a detailed list of the deferred Work and the date(s) by which the Contractor will complete that Work.
- B. CMHA shall submit the partial Certificate of Contract Completion to Contractor for their written acceptance. Upon their acceptance of the partial Certificate of Contract Completion and consent of the Contractor's Surety, CMHA may release payment to the Contractor, as determined in the sole discretion of CMHA.

9.8.2. Final Contract Completion

- A. Contract Completion shall occur no later than calendar days from the date of Substantial Completion.
- B. When all items on CMHA's Punch List have been completed to the satisfaction of CMHA, all requirements of the Contract Documents have been completed, and the provisions have been fulfilled, CMHA shall prepare and recommend execution of final Contract payment.
- C. The date that CMHA executes the final Certificate of Contract Completion or issues Contract payment, whichever is later, is the date of Contract Completion.
- D. Nothing in Contract Completion shall constitute a waiver of CMHA's ability to pursue damages as the result of any breach of the Contract by the Contractor or Liquidated Damages.

10. ARTICLE X SUSPENSION AND TERMINATION

10.1. Suspension of the Work

- 10.1.1.** 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 CMHA.
- 10.1.2.** If the performance of all or any part of the work is, for an unreasonable period of time, suspended, delayed, or interrupted by an act of CMHA in the administration of this Contract, or by CMHA'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.
- A.** However, no adjustment shall be made 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.
- 10.1.3.** A Claim shall not be allowed:
- A.** For any costs incurred more than twenty (20) calendar 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
- B.** 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 no later than the date of final payment under the Contract.
- 10.1.4.** If CMHA suspends the Work under ARTICLE X SUSPENSION AND TERMINATION and the Contractor submits a proper Payment Request, subject to all other provisions of the Contract Documents, the Contractor shall be entitled to payment of compensation due under the Contract Documents for the Work performed before the suspension based upon the Schedule of Values.
- 10.1.5.** CMHA, without prejudice to any other right or remedy it may have, may order the Contractor in writing to suspend, delay, or interrupt the performance of the Work in whole or in part for such period as CMHA may determine for any of the following reasons:
- A.** Defective Work;
- B.** The Contractor is causing undue risk of damage to any part of the Project or adjacent area;
- C.** The Contractor fails to furnish or perform the Work in such a way that the complete Work will conform to the requirements of the Contract Documents; or
- D.** Any other cause CMHA reasonably believes justifies suspension.
- i.** CMHA's exercise of its right to suspend the Work shall not entitle Contractor to any adjustment of the Contract Sum, Contract Time or both.
- 10.1.6.** Upon receipt of the notice of suspension, the Contractor shall cease Work on the suspended activities and take all necessary or appropriate steps to limit disbursements and minimize respective costs.
- A.** The Contractor shall furnish a report to CMHA within five (5) business days of receiving the notice of suspension, describing the status of the Work, including, but not limited to, results accomplished, resulting conclusions, and other information as CMHA may require.
- 10.1.7.** CMHA's right to stop the Work shall not give rise to any duty to exercise the right for the benefit of the Contractor or any other party, and CMHA's exercise or failure to exercise the right shall not prejudice any of CMHA's other rights including the right to suspend the Work in the future under the same or similar circumstances.
- 10.2. Termination for Convenience**
- 10.2.1.** CMHA, through 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 CMHA.
- A.** 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 termination becomes effective.

- 10.2.2.** Upon delivery of the notice of termination for convenience, the Contractor shall immediately proceed with performance of the following duties in accordance with instructions from CMHA:
- A.** Cease operations as specified in the notice;
 - B.** Place no further orders and enter into no further subcontracts for materials, labor, services, or facilities, except as necessary to complete continued portions of the Project;
 - C.** Terminate all subcontracts and orders to the extent they are related to the Work terminated;
 - D.** Proceed with Work not terminated; and
 - E.** Take actions that may be necessary, or that CMHA may direct, for the protection and preservation of the terminated Work.
 - i.** Failure to do so may lead to Contractor's liability for actual damages as a result of Contractor's failure to protect the Work.
- 10.2.3.** If the performance of the work is terminated, either in whole or in part, CMHA shall be liable to the Contractor for reasonable and proper costs resulting from such termination upon the receipt by CMHA of a properly presented claim setting out in detail:
- A.** The total cost of the work performed to date of termination less the total amount of contract payments made to the Contractor;
 - B.** The cost 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 CMHA to the Contractor or by the Contractor to the Subcontractor or supplier;
 - C.** The cost of preserving and protecting the work already performed until CMHA or assignee takes possession thereof or assumes responsibility therefore; and
 - D.** An amount constituting a reasonable profit on the value of the work performed by the Contractor.
- 10.2.4.** CMHA will act on the Contractor's claim within sixty (60) calendar days (unless CMHA deems in writing that additional time is needed for review) of receipt of the Contractor's claim.
- 10.2.5.** Any disputes are expressly made subject to the provisions of this Contract.

10.2.6. If CMHA terminates the Work the termination shall not affect the rights or remedies of CMHA against the Contractor then existing or which may thereafter accrue.

10.2.7. Notwithstanding, if CMHA terminates the Work but there exists an event of Contractor's default, the Contractor shall be entitled to receive only such amounts as it would be entitled to receive following the occurrence of an event of default as provided for below.

10.3. Termination for Cause/Default

10.3.1. If the Contractor materially breaches this Contract, including without limitation, 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, CMHA 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.

- A.** In this event, CMHA 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.
- B.** The Contractor and its sureties shall be liable for any damage to CMHA resulting from the 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.
 - i.** This liability includes any increased costs incurred by CMHA in completing the Work.
- C.** Other examples of material breaches of the Contract include but are not limited to:
 - i.** Refusal to remedy defective work;
 - ii.** Failure to supply enough properly skilled workers or proper materials;
 - iii.** Failure to provide revised Construction Progress Schedule or Recovery Plan;
 - iv.** Failure to properly make payment to Subcontractors or Consultants; or
 - v.** Disregarding laws, ordinances, or rules, regulations, or orders of a public authority with jurisdiction over the Project.

10.3.2. If CMHA intends to exercise its termination right, CMHA shall issue not less than five (5) business days written notice to the Contractor and the Contractor's Surety in accordance with ORC.

- A.** Notwithstanding any provision of the Contract to the contrary, the issuance of a 3-Day Notice is not a condition precedent to CMHA's exercise of its rights and CMHA's decision to not issue a 3-Day Notice will not prejudice CMHA's rights under this.

10.3.3. If the Contractor fails to satisfy the requirements set forth in the 5-Day Notice within fifteen (15) calendar days of receipt of the 5-Day Notice or as otherwise specified in the notice, CMHA may declare the Contractor in default, terminate the Contract, and employ upon the Work the additional force or supply materials or either as appropriate, and remove Defective Work.

10.3.4. 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 CMHA.

10.3.5. If the Contract is terminated, the Contractor's Surety may perform the Contract.

- A.** If the Contractor's Surety does not commence performance of the Contract within ten (10) calendar days of the date of Contract termination, CMHA may complete the Work by means that CMHA deems appropriate.
 - i.** CMHA may take possession of and use all materials, facilities, and equipment at the Site or stored off-site, for which CMHA has paid.
- B.** If CMHA notifies the Contractor's surety that the Contractor is in default or terminates the Contract, the surety will promptly and in not less than twenty-one (21) calendar days investigate the claimed material default or termination.
 - i.** If CMHA gives a notice of default and then terminates the Contract, the surety shall complete its investigation within twenty-one (21) calendar days of the notice of default.
 - (a)** As part of such investigation, the surety shall visit the offices of the Contractor, A/E and CMHA to review the available project records.

- ii. If the surety proposes to take over the Work, the surety shall do so no later than the expiration of such 21-day period or ten (10) calendar days after the date CMHA terminates the Contract, whichever is later.
 - iii. If CMHA terminates the Work, and the surety proposes to provide a replacement contractor, the replacement contractor shall be fully capable of performing the Work in accordance with the Contract Documents, including meeting all the requirements of the Contract Documents.
 - (a) If the Contractor is terminated, the replacement contractor shall not be the Contractor.
 - iv. The surety will provide the Owner with the results of its investigation, including any written report or documents.
- C. Termination for Cause/Default is in addition to CHMA's other rights under the Contract Documents and is not intended to create any rights of the surety, including but not limited to the right to take over the Contractor's obligations.

10.3.6. If the Contract is terminated for cause, the Contractor shall not be entitled to further payment.

- A. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify, defend and hold harmless CMHA, from and against all claims, (whether alleged or proven), demands, costs, losses, and damages, including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs, arising out of or related the costs incurred by CMHA to finish the Work following termination of the Contractor for cause.
- B. If the unpaid balance of the Contract Sum exceeds the costs of finishing the Work, including without limitation the fees and charges of engineers, architects, attorneys, and other professionals and court costs, and other damages incurred by CMHA and not expressly waived, the Contractor or Surety shall immediately pay the amount of insufficiency to CMHA.
- C. This obligation for payment shall survive termination of the Contract.

10.3.7. If the Contractor's Surety performs the Work, the provisions of the Contract Documents govern the Surety's performance, with the Surety in place of Contractor in all provisions including, but not limited to, provisions for payment for the Work, and provisions of the right of CMHA to complete the Work.

10.3.8. If CMHA terminates the Contract, the termination shall not affect any rights or remedies of CMHA against the Contractor then existing or which may thereafter accrue.

- A. CMHA's retention or payment of funds due to the Contractor shall not release the Contractor or the Contractor's Surety from liability for performance of the Work in accordance with the Contract Documents.

10.4. Contractor Insolvency

10.4.1. Bankruptcy of Contractor

- A. If the Contractor files a voluntary petition in bankruptcy or has an involuntary petition in bankruptcy filed against it, the Contractor, the Contractor as the debtor-in-possession, or the trustee of the Contractor's bankruptcy estate shall notify CMHA in writing within five (5) days of such filing and file a motion to assume or reject the Contract within twenty (20) calendar days after the filing of the petition and shall diligently prosecute that motion to conclusion so as to obtain an order granting or denying that motion within forty-five (45) calendar days after the filing of the petition.
- B. The failure of the Contractor to file and prosecute that motion Contractor shall constitute a material breach of the Contract by the Contractor as time is of the essence with respect to Contractor's performance of all terms of this Contract.
- C. The Contractor agrees to the granting of relief from the automatic stay of the Bankruptcy Code, to permit CMHA to terminate the Contract for cause in such instance and issue and serve all notices necessary to terminate the Contract or arising out of termination of the Contract and to take any other action necessary to terminate the Contract.

10.4.2. Receivership or Assignment for the Benefit of Creditors

- A.** If the Contractor makes a general assignment for the benefit of creditors or if a receiver is appointed for all or a substantial part of Contractor's business or property, CMHA shall serve written notice to the Contractor and Contractor's Surety stating that any failure of the Contractor to provide adequate assurance of continued performance shall be considered a rejection of the Contract, which shall result in termination of the Contract for cause.
- B.** Termination of the Contract need not be evidenced by an order of any court.

11. ARTICLE XI DISPUTE RESOLUTION/CLAIM PROCEDURE

11.1. General

- 11.1.1.** "Claim," as used in ARTICLE XI DISPUTE RESOLUTION/CLAIM PROCEDURE, 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, additional time, the adjustment or interpretation of contract terms, or other relief arising under or relating to the contract.
- 11.1.2.** 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.
- 11.1.3.** A voucher, invoice, application for payment, or other routine request for payment that is permitted under the Contract Documents and is not in dispute when submitted, is not a Claim.
- 11.1.4.** The submission may be converted to a Claim by complying with the requirements of ARTICLE XI DISPUTE RESOLUTION/CLAIM PROCEDURE, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.
- 11.1.5.** Except for disputes arising under ARTICLE XIX LABOR STANDARDS, 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 ARTICLE XI DISPUTE RESOLUTION/CLAIM PROCEDURE.
- 11.1.6.** All Claims by the Contractor shall be made in writing and submitted to CMHA for a written decision.
 - A.** A claim by CMHA against the Contractor shall be subject to a written decision by the Contracting Officer.

11.2. Initiation of a Claim

- 11.2.1.** Every Claim shall accrue upon the date of occurrence of the event giving rise to the Claim.
- 11.2.2.** Except as provided, the Contractor shall initiate every Claim by giving written notice of the Claim to CMHA within ten (10) calendar days after occurrence of the event giving rise to the Claim, with the following exceptions:
 - A.** The 10-day time limit on initiating a Claim arising from the response of an RFI by CMHA begins to run on the date of the response.
 - B.** The 10-day time limit on initiating a Claim arising from CMHA's determination concerning a Differing Site Condition begins to run on the date of the determination .
- 11.2.3.** The Contractor's written notice of a Claim shall provide the following information:
 - A.** Nature and anticipated amount of the impact, including all costs for any interference, disruption, hindrance, or delay, which shall be calculated and be a fair and reasonably accurate assessment of the damages suffered or anticipated by the Contractor;
 - B.** Identification of the circumstances responsible for causing the impact, including, but not limited to, the date or anticipated date, of the commencement of any interference, disruption, hindrance, or delay;
 - C.** Identification of activities on the Construction Progress Schedule that will be affected by the impact or new activities that may be created and the relationship with existing activities;
 - D.** Anticipated impacts and anticipated duration of any interference, disruption, hindrance, delay, or impact, and any remobilization period; and
 - E.** Recommended action to avoid or minimize any interference, disruption, hindrance, delay, or impact.
- 11.2.4.** The Contractor's failure to initiate a Claim as and when required shall constitute the Contractor's irrevocable waiver of the Claim.

11.3. Substantiation of Claims General

- 11.3.1.** Within thirty (30) calendar days after the initiation of a Claim, the Contractor shall submit three (3) copies of all information and statements required to substantiate a Claim and all other information that the Contractor believes substantiates the Claim.
- 11.3.2.** The Contractor shall substantiate all of its Claims by providing the following minimum information:
 - A.** A narrative of the circumstances, which gave rise to the Claim, including without limitation the start date of the event or events and the actual or anticipated finish date;
 - B.** Detailed identification of the Work affected by the event giving rise to the Claim;
 - C.** Copies of the Contractor's daily log for each day of impact;

- D. Copies of relevant correspondence and other information regarding or supporting Contractor's entitlement;
- E. Copies of any and all information related to the Contractor's costs, including all job cost reports, bid take offs, and other financial information related to the Contractor's Claim;
- F. The notarized Certification of a Claim

11.4. Substantiation of Claims for increase of the Contract Sum

11.4.1. In addition to the minimum information required by Contractor, the Contractor shall substantiate each Claim for an increase of the Contract Sum with:

- A. Written documentation of the actual additional direct and indirect costs to the Contractor due to the event giving rise to the Claim;
- B. A written statement from the Contractor that the increase requested is the entire increase in the Contract Sum associated with the Claim; and
- C. The general substantiation documentation.

11.5. Substantiation of Claims for Extension of the Contract Time

11.5.1. In addition to the minimum information required by Contractor, the Contractor shall substantiate each Claim for an extension of the Contract Times with:

- A. Written documentation of the actual delay to the critical path of the Construction Progress Schedule due to the event giving rise to the Claim;
- B. A detailed written Proposal for an increase in the Contract Sum that would fully compensate the Contractor for all costs of acceleration of the Work needed to completely overcome the associated delay, A written statement from the Contractor that the extension requested is the entire extension of the Contract Times associated with the Claim; and
- D. The general substantiating documentation.

11.5.2. In addition, if adverse weather conditions are the basis for a Claim for additional time, the Contractor shall document the Claim with data substantiating that weather conditions were abnormal for the period, could not have been reasonably anticipated, and had an adverse effect on a critical element of the scheduled construction.

11.6. Certification of a Claim

11.6.1. The Contractor shall certify each Claim within thirty (30) calendar days after initiating the Claim or before Contract Completion, whichever is earlier, by providing the notarized Certification of a Claim specified below, signed and dated by the Contractor:

- A. *"The undersigned Contractor certifies that the Claim is made in good faith; that the supporting data is accurate and complete to the best of the Contractor's knowledge and belief; that the amount requested is a fair, reasonable, and necessary adjustment for which the Contractor believes that CMHA is liable; and that the undersigned is duly authorized to certify the Claim on behalf of the Contractor."*

11.7. Delay and Delay Damage Limitations

11.7.1. Subject to other provisions of the Contract, the Contractor will be entitled to an extension of the Contract Times on account of delay in the commencement or progress of Work on the critical path of the Construction Progress Schedule caused by acts of unforeseeable Nature or the public enemy, acts of the government not arising from the Contractor's failure to comply with Applicable Law, fires, floods, epidemics, weather, and labor disputes beyond the Contractor's control.

11.7.2. Notwithstanding any other provision of the Contract Documents to the contrary, the Contractor shall not be entitled to an increase in the Contract Sum, or an extension of the Contract Times, or both:

- A. On account of the impact of any normal adverse weather on any of the Work or on account of the impact of any abnormal adverse weather on Work not on the critical path;
- B. To the extent that a delay occurs concurrently with a delay attributable to the Contractor; or
- C. On account of the delay of any Work not on the critical path.
 - i. When the Contractor is prevented from completing any part of the Work on the critical path within the Contract Time due to weather conditions, provided the Contractor properly initiates a Claim, the Contract Time will be extended by one (1) day for each work day lost due to weather that delays Work on the critical path in excess of those in the following table:

Month	Number of Workdays Lost Due To Weather
January	8
February	8
March	7
April	6
May	5
June	4
July	4
August	4
September	5
October	6
November	6
December	6

11.7.3. Notwithstanding any other provision of the Contract Documents to the contrary, the Contractor shall not be entitled to an increase in the Contract Sum or any type of damages on account of a delay in the commencement or progress of Work on the critical path unless:

- A. The delay is caused by CMHA; and
- B. The delay was not authorized or permitted under the Contract.

11.7.4. Notwithstanding any other provision of the Contract Documents to the contrary, the Contractor shall not be entitled to an increase in the Contract Sum or any type of damages arising from a delay in the commencement or progress of any the Work caused by the occurrence or non-occurrence of an event beyond CMHA's control such as acts of Nature or the public enemy, acts of the government, fires, floods, epidemics, labor disputes, unusual delivery delays, weather, or damages caused by the Contractor.

11.8. Derivative Claims

11.8.1. Notwithstanding any other provision of the Contract to the contrary, if CMHA prosecutes a claim, suit, or appeal against a Separate Consultant or Separate Contractor to recover damages the Contractor suffers on account of the acts or neglects of a Separate Consultant or Separate Contractor or person or entity for whom either is legally responsible, CMHA's liability to the Contractor shall not exceed the amount CMHA actually recovers from the Separate Consultant or Separate Contractor on account of those damages less the costs CMHA incurs recovering them. CMHA is not obligated to prosecute any such claim, suit, or appeal.

11.9. Claim Decision

11.9.1. CMHA shall, within sixty (60) calendar days (unless otherwise requested), decide Claims submitted by Contractor or notify the Contractor of the date by which the decision will be made.

11.9.2. The Contracting Officer's decision shall be final with respect to Claims by Contractor unless the Contractor:

- A. Appeals in writing to a higher level at CMHA in accordance with the CMHA's policy and procedures;
- B. Refers the appeal to an independent mediator or arbitrator; or
- C. Files suit in a court of competent jurisdiction. Such suit must be filed within fifteen (15) calendar days (unless a different time period is identified in the Claim Decision) after receipt of CMHA's decision.

11.9.3. 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 CMHA.

11.10. Audit of a Claim

11.10.1. All Claims submitted by Contractor shall be subject to audit at any time following filing of the Claim by Contractor, whether or not the Claim is part of any lawsuit.

11.10.2. The audit may be performed by employees of CMHA or by a consultant engaged by CMHA.

11.10.3. The audit may begin upon 10-days' notice to the affected Contractor or affected Subcontractor.

11.10.4. The Contractor shall cooperate with the request.

11.10.5. Failure of the Contractor or Subcontractor to produce sufficient records to allow CMHA to audit and verify a Claim shall constitute an irrevocable waiver of the Claim or portion of the Claim that could not be completely audited.

11.10.6. The Contractor shall make available to CMHA all Contractor and Subcontractor documents related to the Claim including, without limitation, the following documents:

- A.** Daily time sheets and superintendent's daily reports;
- B.** Union agreements, if any, and employer agreements;
- C.** Insurance, welfare, fringes, and benefits records;
- D.** Payroll tax returns;
- E.** Material invoices, purchase orders, Subcontracts, and all material and supply acquisition contracts;
- F.** Material cost distribution worksheets;
- G.** Equipment records (list of Contractor equipment, rates, etc.);
- H.** Vendor rental agreements and Subcontractor invoices;
- I.** Subcontractor payment certificates;
- J.** Canceled checks (payroll and vendors);
- K.** Job cost report;
- L.** Job payroll ledger;
- M.** General ledger, general journal, (if used) and all subsidiary ledgers and journals together with all supporting documentation pertinent to entries made in these ledgers and journals;
- N.** Cash disbursements journal;
- O.** Financial statements for all years reflecting operations on the Project;
- P.** Income tax returns for all years reflecting operations on the Project;
- Q.** Depreciation records on all equipment utilized whether the records are maintained by the Contractor, its accountant, or others;
- R.** If a source other than depreciation records is used to develop costs for the Contractor's internal purposes in establishing the actual cost of owning and operating equipment, all other source documents;
- S.** All documents that reflect the Contractor's actual profit and overhead during the years the Project was being performed;
- T.** All documents related to the preparation of the Contractor's Bid, including the final calculations on which the Bid was based, unless the documents are placed in escrow under provisions of the Instructions to Bidders;
- U.** All documents that relate to the Claim together with all documents that support the amount of damages as to the Claim;
- V.** Worksheets used to prepare the Claim establishing the cost components for items of the Claim including, but not limited to, labor, fringes, benefits and insurance, materials, equipment, Subcontractors, and all documents that establish the periods of time, individuals involved, the hours and rate of pay for the individuals; and
- W.** All other documents required by CMHA to reasonably review the Claim.

11.11. False Certification of a Claim

11.11.1. If the Contractor falsely certifies all or any part of a Claim, the portion of the Claim falsely certified shall be denied, and may be sufficient cause for CMHA to exclude Contractor from future contracting opportunities as permitted by law.

11.11.2. The Contractor shall not knowingly present or cause to be presented to the Owner a false or fraudulent Claim.

- A.** Knowingly shall have the same meaning as in [the Federal False Claims Act](#).

11.11.3. If the Contractor knowingly presents or causes to be presented a false or fraudulent Claim, then the Contractor shall be liable to the Owner for the same civil penalty and damages as the United States Government would be entitled to recover and shall also indemnify and hold the Owner harmless from all costs and expenses, including Owner's attorneys' and consultants' fees and expenses incurred in investigating and defending against such Claim and in pursuing the collection of such penalty, damages and fees and expenses.

12. ARTICLE XII WARRANTY

12.1. Warranty of Title

- 12.1.1.** 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.

12.2. Warranty of Construction

- 12.2.1.** In addition to any other warranties in this Contract, the Contractor warrants 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.
- A.** Work not conforming to those requirements, including Substitutions not properly approved and authorized, may be considered Defective Work.
- B.** If required by CMHA, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.
- 12.2.2.** The Contractor shall remedy, at the Contractor's expense, any Work that does not conform to the requirements of the Contract Documents, or any Defective Work.
- A.** In addition, the Contractor shall remedy, at the Contractor's expense, any damage to CMHA-owned or controlled real or personal property when the damage is the result of:
- i.** Any action or inaction by Contractor;
- ii.** The Contractor's failure to conform to Contract requirements; or
- iii.** Any defects of equipment, material, workmanship or design furnished by the Contractor.
- 12.2.3.** The Contractor shall restore any work damaged in fulfilling the terms and conditions of Warranty of Construction.
- A.** The Contractor's Warranty with respect to work repaired or replaced shall be extended for a period of not less than one year, beyond the original Warranty period required under the Contract, of repair or replacement.
- 12.2.4.** CMHA shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect or damage.
- A.** If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, CMHA shall have the right to replace, repair or otherwise remedy the failure, defect, or damage at the Contractor's expense.
- 12.2.5.** 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:
- A.** Obtain all warranties that would be given in normal commercial practice;
- B.** Require all warranties to be executed in writing, for the benefit of CMHA; and
- C.** Enforce all warranties for the benefit of CMHA.
- 12.2.6.** If the Contractor or a Subcontractor recommends a particular product, material, system, or item of equipment for incorporation into the Project and CMHA accepts that recommendation, the above Warranty shall include a warranty from the Contractor to CMHA that the recommended product, material, system, or item of equipment is fit and appropriate for the associated purpose.

12.3. Warranty Walk-through Contractor

- 12.3.1.** At CMHA's request, Contractor shall perform a walkthrough of the property no earlier than three months prior to the expiration of any Warranty.
- A.** If Contractor is unavailable for the Warranty walk-thru, the Warranty shall be extended until the time Contractor is available.

13. ARTICLE XIII BONDS

13.1. Bid Bond/Guaranty

- 13.1.1.** The Contractor shall provide to CMHA a Bid Guaranty in the form of either:
- A.** A Bond for 10% of the Bid; or
 - B.** A certified check, cashier's check or letter of credit revocable only at the option of CMHA and shall be in the amount of 10% of the Bid.
- 13.1.2.** The Bid Guaranty shall be conditioned to:
- A.** Provide that Contractor will, after award, enter into a contract with CMHA in accordance with the bid, plans, details, and specifications.
 - B.** If the Bidder fails to enter into the Contract and CMHA awards Contract to next lowest bidder, the Bidder and the Surety on the Bidder's Bid are liable to CMHA for the lessor of either:
 - i.** The difference between the Bidder's Bid amount and the bid amount of the next lowest bidder; or
 - ii.** For a penal sum of the Bond in the amount of 10% of the Bidder's Bid.
 - C.** If CMHA does not award the Contract to the next lowest bidder but resubmits the Project for bidding, the Bidder failing to enter into the Contract and the Surety on the Bidder's Bond are liable to CMHA for a penal sum on the Bond not to exceed 10% of the amount of the Bidder's Bid amount.
- 13.1.3.** Where CMHA accepts a Bid but the Bidder fails or refuses to enter into a Contract in accordance with the Contract Documents included with the Bid, including the plans, details, and specifications, within ten (10) calendar days after Notice of Intent, the Bidder and Surety on any Bond are liable for the amount of the difference between the amount of the Bidder's Bid and the amount of the Bid from next lowest Bidder.
- 13.1.4.** All Bid Guaranties shall be payable to CMHA, be for the benefit of CMHA and be deposited with CMHA.

13.2. Payment and Performance Bond

- 13.2.1.** In addition to any other requirements in the Contract Documents, Contract Commencement does not occur until CMHA receives a Payment and Performance Bond.
- 13.2.2.** Contractor shall, within ten (10) calendar days of CMHA's delivery of signed Contract to Contractor, unless otherwise specified by CMHA in writing, deliver to CMHA a payment and performance bond with a penal sum in the amount of 100% of the Contract Sum (which includes all acceptable alternates).
- 13.2.3.** The Payment and Performance Bond shall contain the following a condition that indemnifies CMHA against all damages suffered by CMHA as a result of the failure of Contractor to perform the Work in accordance with the requirements of the Contract Documents, including, the plans, details, and specifications, and the Payment and Performance Bond shall state that Contractor shall pay all lawful claims of Subcontractors, material suppliers, and laborers for labor performed or material furnished in carrying forward, performing or completing the Contract.
- 13.2.4.** All Bonds requirement by the Contract shall be obtained from companies holding certificates of authority as acceptable sureties and shall be listed on the U.S Treasury Circular 570 (T-List).
- A.** Each company shall be licensed to do business in Ohio and satisfactory to CMHA.
- 13.2.5.** The Contractor shall submit with each executed Bond:
- A.** A certified copy of the authority to act (power of attorney) of the agent signing the Bond on behalf of the Surety, and
 - B.** A current signed Certificate of Compliance issued by the Ohio Department of Insurance demonstrating that Surety is licensed to do business in Ohio.
- 13.2.6.** If the Contract Sum increases at any time such that it exceeds the sum of the Bond, the Contractor shall cause the penal sum of the Bond to be increased such that the sum equals one-hundred percent of the increased Contract Sum.
- 13.2.7.** Any time Contractor increases the sum of the Bond, the Contractor shall deliver to CMHA written consent of the affected Surety confirming the increased penal sum of the Bond.
- A.** CMHA's receipt of that written consent is a condition precedent to CMHA's obligation to pay the Contractor for any portion of the Work associated with the increase.
- 13.2.8.** If notice of any change affecting the Contract is required by any Surety or by the provision of any Bond, the Contractor shall provide that notice.

14. ARTICLE XIV INSURANCE

14.1. Contractor's General Insurance Requirements

- 14.1.1.** Throughout the performance of the Work or longer as may be described below, the Contractor and each Subcontractor shall obtain, pay for and keep in force, the minimum insurance coverage.
- 14.1.2.** On a case-by-case basis, CMHA and Contractor may mutually agree to adjust the insurance requirements for any particular subcontractor.
- 14.1.3.** All insurance shall be carried with companies which are financially responsible and admitted to do business in the State of Ohio.
 - A.** If any such insurance is due to expire prior to Contract Completion, the Contractor (including Subcontractors, as applicable) shall not permit the coverage to lapse and shall furnish evidence of coverage to the Contracting Officer.
 - B.** 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 thirty (30) calendar days prior written notice has been given to CMHA.

14.2. Minimum Coverage Requirements

14.2.1. Workers' Compensation:

- A.** In accordance with the State of Ohio Workers' Compensation laws

14.2.2. Commercial General Liability

- A.** With a combined single limit for bodily injury and property damage of not less than \$1,000,000 per occurrence unless otherwise specified by CMHA in writing, to protect the Contractor and each subcontractor against claims for bodily injury or death and damage to the property of others.
- B.** This shall cover the use of all equipment, hoists, and vehicles on the site(s) not covered by Automobile Liability.
- C.** If the Contractor has a "claims made" policy, then the following additional requirements apply:
 - i.** The policy must provide a "retroactive date" which must be on or before the execution date of the Contract; and
 - ii.** The extended reporting period may not be less than five years following the completion date of the Contract.

14.2.3. Employers Liability Coverage

- A.** Unless otherwise specified by CMHA in writing, the Contractor shall maintain employer's liability coverage with:
 - i.** An each accident limit of not less than \$1,000,000;
 - ii.** A disease each-employee limit of not less than \$1,000,000; and
 - iii.** A disease policy limit of not less than \$1,000,000.

14.2.4. Automobile Liability

- A.** 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 \$ 1,000,000 per occurrence.

14.2.5. Builder's Risk Insurance

- A.** Before commencing Work, the Contractor shall furnish CMHA 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.
 - i.** The Builder's Risk Insurance shall be for the benefit of the Contractor and CMHA as their interests may appear and each shall be named in the policy or policies as an insured.
 - ii.** The Contractor if installing equipment supplied by CMHA shall carry insurance on such equipment from the time the Contractor takes possession thereof until the Contract work is accepted by CMHA.
 - iii.** 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.
 - iv.** It need not be carried on landscape work.

- v. 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 CMHA.
 - vi. The Contractor may terminate this insurance on buildings as of the date CMHA issues a Certificate of Contract Completion.
- B. The amount of Builder's Risk coverage shall not be less than the total completed value of the Project, including the value of permanent fixtures and decorations, with a deductible of not more than \$25,000 per occurrence.
 - i. Contractor shall be responsible for paying all deductibles for any and all claims made under the Builder's Risk policy; and,
 - ii. Any deductible over the amount specified in this provision shall be authorized in writing by CMHA.
- C. Coverage shall include a provision to pay the reasonable extra costs of acceleration and expediting temporary and permanent repairs to, or permanent replacement of, damaged property.
 - i. This shall include overtime wages and the extra costs of "express" or other means of expedited transportation and/or delivery of supplies necessary to the repair or replacement.
- D. Coverage shall include "soft costs endorsement" including, but not limited to, the reasonable extra costs of the A/E and reasonable Contractor extension or acceleration costs.
- E. Coverage shall include material in transit or stored in off-site and identified for the Project.
- F. Coverage shall waive all rights between CMHA, Contractor, and Subcontractors at any tier, for damages caused by fire or any other perils to the extent of actual recovery of any insurance proceeds under the policy.
- G. Coverage shall include appropriate sub-limits for installation coverage.
- H. Coverage shall include provisions for mechanical or electrical breakdown, or boiler system testing.
- I. Coverage shall include temporary structures and scaffolding, along with collapse coverage.
- J. Coverage shall be primary to all other applicable insurance.
- K. The Builder's Risk policy shall specifically permit partial occupancy by CMHA prior to Contract Completion and coverage shall remain in effect until CMHA issues a Certificate of Contract Completion.
- L. The Contractor's tools and equipment shall not be covered under the Builder's Risk policy.
 - i. It is the Contractor's sole responsibility to maintain insurance coverage for tools and equipment used on the Project, which shall be included in its Overhead (a component of Contractor's Fee) and not included as a separate item in Contractor's Schedule of Values.
- M. If Contractor is involved solely in the installation of material and equipment and not in new building construction, the Contractor shall purchase and maintain a Builder's Risk, Builder's Risk-renovations, or installation floater insurance policy that complies with the requirements of Article XIV.

14.2.6. Umbrella/Excess Liability

- A. The Contractor may employ an umbrella/excess liability policy to achieve the above required minimum coverage.
- B. Unless otherwise specified by CMHA in writing, for Construction Contracts in excess \$1,000,000, the Contractor shall maintain umbrella/excess liability coverage with a limit of not less than \$2,000,000 (in addition to the above-required limits) if the Work (or Work to be performed by the Subcontractor) includes any of the following:
 - i. Brick/block masonry;
 - ii. Exterior caulking/sealant;
 - iii. Cast-in-place or precast concrete;
 - iv. Damp proofing/waterproofing;
 - v. Electrical;
 - vi. Elevator;
 - vii. Exterior glass and/or glazing;
 - viii. Exterior marble, granite, and/or other stonework;
 - ix. Miscellaneous metals;
 - x. Plaster/stucco;

- xii. Plumbing;
 - xiii. HVAC;
 - xiv. Roofing and/or sheet metal;
 - xv. Scaffolding;
 - xvi. Spray-on fireproofing;
 - xvii. Sprinkler and/or fire protection; or
 - xviii. Structural steel and/or metal deck.
- C. Unless otherwise specified by CMHA in writing, the Contractor shall maintain umbrella/excess liability coverage with a limit of not less than \$5,000,000 (in addition to the above-required limits) if the Work (or the Work to be performed by the Subcontractor) includes any of the following:
 - i. Caissons and/or piles;
 - ii. Major Demolition;
 - iii. Excavation and/or utility work;
 - iv. Sheeting, shoring, and/or underpinning;
 - v. Window washing equipment; or
 - vi. Wrecking.

14.2.7. Professional Liability – Contractor

- A. Unless otherwise specified by CMHA in writing, the Contractor shall maintain professional liability insurance (including without limitation for sprinkler and/or fire protection and other design-build work included in the Work) without design-build exclusions with a limit not-less than \$1,000,000 each claim and an annual-aggregate limit of not less than \$2,000,000.
- B. The professional liability policy shall have an effective date on or before the date that the Contractor first started to provide any Project-related services.
- C. Upon submission of the associated certificate of insurance and at each policy renewal, the Contractor shall advise CMHA in writing of any actual or alleged claims that may erode the professional liability limits.
- D. The Contractor shall maintain the professional liability insurance in effect for no less than 5 years after the earlier of the termination of the Contract or Substantial Completion of all Work.

14.2.8. Additional Property Insurance

- A. For any demolition, blasting, excavating, tunneling, shoring, or similar operations, the Contractor shall provide and maintain Property Damage Liability insurance with a limit of liability equal to the limit as specified in the applicable provisions of ARTICLE XIV INSURANCE.

14.2.9. Equipment Coverage

- A. CMHA will not insure or be liable for damage to any Contractor or Subcontractor owned, leased, rented, or borrowed tools, equipment, or vehicles.
- B. The Contractor and Subcontractors are solely responsible for maintaining all insurance necessary to cover their tools, equipment, and vehicles.

14.3. Waivers of Subrogation

- 14.3.1.** To the fullest extent permitted by applicable laws, the Contractor waives all rights against CMHA and its agents and employees for damages to the extent covered by any insurance, except rights to the proceeds of that insurance.
 - A. All policies shall accomplish the waiver of subrogation by endorsement or otherwise.
- 14.3.2.** CMHA and Contractor waive all rights against each other for damages caused by fire or other perils to the extent actual recovery of any insurance proceeds under any property insurance or Builder's Risk insurance applicable to the Work.

15. ARTICLE XV INDEMNIFICATION

- 15.1.** To the fullest extent permitted by Applicable Law, the Contractor shall indemnify, defend, and hold harmless the Indemnified Parties from and against all claims, costs, damages, losses, fines, penalties, and expenses (including but not limited to all fees and charges of attorneys and other professionals, and all court, arbitration, or other dispute-resolution costs) arising out of or in connection with the Project.
- 15.2.** The Contractor's indemnification obligation under ARTICLE XV INDEMNIFICATION exists regardless of whether or not and the extent to which the claim, damage, loss, fine, penalty, or expense is caused by a party indemnified under ARTICLE XV INDEMNIFICATION.
- 15.2.1.** Nothing in ARTICLE XV INDEMNIFICATION obligates the Contractor to indemnify any individual or entity from and against the consequences of that individual or entity's own negligence.
- 15.3.** The Contractor's obligations under ARTICLE XV INDEMNIFICATION shall not extend to the liability of the A/E, A/E's consultants, agents, representatives, or employees for negligent preparation or approval of Drawings, Specifications, Change Orders, opinions, and other responsibilities of the A/E, except to the extent covered by the Contractor's insurance.
- 15.4.** In claims against an Indemnified Party by any direct or indirect employee (or the survivor or personal representative of that employee) of the Contractor or a person or entity for whom the Contractor may be liable, the indemnification obligation under ARTICLE XV INDEMNIFICATION will not be limited by a limitation on the amount or type of damages, compensation, or benefits payable under workers' compensation acts, disability benefit acts, or other employee benefits acts.
- 15.5.** The Contractor's indemnification obligation under ARTICLE XV INDEMNIFICATION will survive termination of the Contract and Date for Contract Completion.
- 15.6.** CMHA may deduct from the Contract Sum any claims, losses, fines, penalties, and expenses for which the Contractor is liable under ARTICLE XV INDEMNIFICATION.
- 15.6.1.** If those claims, damages, losses, fines, penalties and expenses exceed the unpaid balance of the Contract Sum, the Contractor shall immediately pay the difference to CMHA.

16. ARTICLE XVI DAMAGES

16.1. Liquidated Damages

- 16.1.1.** If the Contractor fails reach Substantial Completion within the Contract Time for Substantial Completion, including any properly approved extension for the Contract Time for Substantial Completion, the Contractor shall pay to CMHA as Liquidated Damages, the sum identified in the table under 16.1.4..
- A.** Liquidated Damages for the Date for Contract Completion and any Milestone Dates in the Contract, not including Substantial Completion, shall be assessed on in accordance
 - B.** To the extent that the Contractor's delay or non-performance is excused under another clause in this Contract, Liquidated Damages shall not be due CMHA.
 - C.** The Contractor remains liable for damages caused other than by delay.
- 16.1.2.** If CMHA terminates the Contractor's right to proceed, the resulting damage will consist of Liquidated Damages incurred until the Date of Contract Completion, together with any increased costs incurred by CMHA in completing the Work.
- 16.1.3.** If CMHA does not terminate the Contractor's right to proceed, the resulting damage will consist of Liquidated Damages incurred until the Date of Contract Completion.
- 16.1.4.** If the Contractor fails to achieve a Milestone Date, excluding the Date for Substantial Completion, within the associated Contract Time, the Contractor shall (at CMHA's option) pay to or credit CMHA the Liquidated Damages per day sum determined according to the following schedule for each day that the Contractor fails to achieve a Milestone within the associated Contract Time.

Contract Sum	Liquidated Damages per day
Less than \$100,000	\$200
From \$100,000 to \$500,000	\$400
From \$500,000.01 to \$1,000,000	\$500
From \$1,000,000.01 to \$3,000,000	\$750
More than \$3,000,000	\$1,000

- 16.1.5.** If the Contractor simultaneously fails to achieve two or more Milestones, including the Date for Substantial Completion, CMHA shall be entitled to recover the sum of the associated Liquidated Damages per day rates.
- 16.1.6.** The Liquidated Damages described are only intended to compensate CMHA for the direct damages it incurs as a result of the Contractor's failure to achieve the Milestones, including the Date for Substantial Completion, within their associated Contract Times.
- 16.1.7.** The Liquidated Damages described are not intended to compensate CMHA for any damages CMHA incurs on account of:
- A.** Any claims attributable to the Contractor that are brought by others including Separate Consultants and Separate Contractors; or
 - B.** Any failure of the Contractor to timely, properly, and completely perform the Contract other than the failure to achieve the Milestones, including the Date for Substantial Completion, within their associated Contract Times.
- 16.1.8.** The parties acknowledge that the above-listed Liquidated Damages per day sums are not penalties, and they each irrevocably waive the right (if any) to challenge the validity and enforceability of those Liquidated Damages per day sums.
- A.** Notwithstanding any other provision of the Contract Documents to the contrary, if a court determines that the Liquidated Damages per day sums or their application are void and unenforceable, CMHA shall be entitled to recover the actual damages that it incurs on account of the Contractor's failure to achieve the Date for Substantial Completion and/or one or more of the Milestones within the applicable Contract Times.
- 16.1.9.** In addition to other rights that CMHA may have relative to the Liquidated Damages, CMHA may deduct the Liquidated Damages from the Contract Sum as the damages accrue.

- A. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall immediately pay the amount of the insufficiency to CMHA. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify, defend and hold harmless CMHA, from and against all claims, costs, losses, and damages, including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs, associated with the failure of the Contractor to timely and properly reimburse CMHA for any Liquidated Damages.

16.2. Mutual Waiver of Consequential Damages

16.2.1. Except as provided Liquidated Damages, CMHA and Contractor each waive against the other all Claims for consequential damages that may arise out of or relate to this Contract.

- A. CMHA's waiver includes Claims for loss of use, income, profit, revenue, financing, cost of capital, business and reputation, management and employee productivity, and consequential damages arising from termination of the Contract or related to insolvency.
- B. The Contractor's waiver includes:
 - i. Claims for unabsorbed home-office overhead;
 - ii. Any other form of overhead in excess of that specifically provided for;
 - iii. Delay damages except as otherwise specifically provided for;
 - iv. Increased cost of funds for the Project;
 - v. Lost opportunity to work on other projects;
 - vi. Losses of financing, business, and reputation;
 - vii. Loss of profit except anticipated profit, arising directly from properly performed Work;
 - viii. Loss of bonding capacity; and
 - ix. Consequential damages arising from termination of the Contract or related to insolvency.

16.2.2. Notwithstanding Section 16.2.1, this Section 16.2:

- A. Does not apply to any damages that would be covered by insurance provided in connection with the Project if the Contract did not include Section 16.2.1 ;
- B. Does not apply to the Contractor's indemnity obligations for third-party claims against the Indemnified Parties even if those claims are for damages that Section 16.2.1 would otherwise preclude;
- C. Does not preclude CMHA's recovery of Liquidated Damages; and
- D. Does not apply to Claims for damages arising from CMHA's or the Contractor's gross negligence or willful misconduct.

16.3. This ARTICLE 16 shall survive termination of the Contract.

17. ARTICLE XVII EQUAL OPPORTUNITY

17.1. Prohibition Against Discrimination

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

- A. Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, or handicap.
- B. The Contractor 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, national origin, or handicap.
 - i. Such action shall include, but not be limited to:
 - (a) Employment;
 - (b) Upgrading;
 - (c) Demotion;
 - (d) Transfer
 - (e) Recruitment or recruitment advertising;
 - (f) Layoff or termination;
 - (g) Rates of pay or other forms of compensation; and
 - (h) Selection for training, including apprenticeship.
- C. The Contractor shall post in conspicuous places available to employees and applicants for employment the notices to be provided by CMHA that explain ARTICLE XVII EQUAL OPPORTUNITY.
- D. The Contractor shall, 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, national origin, or handicap.
- E. The Contractor 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 ARTICLE XVII EQUAL OPPORTUNITY, and post copies of the notice in conspicuous places available to employees and applicants for employment.
- F. The Contractor shall comply with [Executive Order 11246, as amended](#), and the rules, regulations, and orders of the Secretary of Labor.
- G. The Contractor shall furnish all information and reports required by [Executive Order 11246, as amended](#), [the Rehabilitation Act of 1973, as amended](#), and by rules, regulations, and orders of the Secretary of Labor, pursuant thereto.
 - i. The Contractor 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 determination that the Contractor is not in compliance with ARTICLE XVII EQUAL OPPORTUNITY or any rule regulations, or order of the Secretary of Labor, 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 under the procedures authorized, in [Executive Order 11246, as amended](#).
 - i. In addition, sanctions may be imposed and remedies invoked against the Contractor as provided in [Executive Order 11246, as amended](#), the rules, regulations, and orders of the Secretary of Labor, or as otherwise provided by law, including the following as provided by ORC:
 - (a) In the event Contractor fails to comply with these nondiscrimination provisions, CMHA shall deduct from the amount payable to the Contractor a forfeiture of the statutory penalty pursuant to ORC for each person who is discriminated against or intimidated.
 - (b) The Contract may be terminated or suspended in whole or in part by CMHA and all money due hereunder may be forfeited in the event of a subsequent violation of the foregoing nondiscrimination provisions.
 - (c) The Contractor shall include the terms and conditions of ARTICLE XVII EQUAL OPPORTUNITY in every Subcontract or purchase order unless exempted by the rules, regulations, or orders of the Secretary of Labor under [Executive Order 11246, as amended](#), so that these terms and conditions will be binding upon each Subcontractor or vendor.

- (d) The Contractor shall take such action with respect to any subcontract or purchase order as the Secretary of Housing and Urban Development or the Secretary of Labor may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided that if the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the Contractor may request the United States to enter into the litigations to protect the interests of the United States.
- I. Compliance with the requirements of ARTICLE XVII EQUAL OPPORTUNITY shall be to the maximum extent consistent with, but not in derogation of compliance with the Indian Self-Determination and Education Assistance Act and the Indians Preference clause of this Contract.
- J. The Contractor shall cooperate fully with the States Equal Opportunity Coordinator (EOC), with any other official or agency of the state or federal government that seeks to eliminate unlawful employment discrimination, and with all other state and federal efforts to assure equal employment practices under the Contract.

18. ARTICLE XVIII SECTION 3

- 18.1.** In order to promote Employment, Training, and Contracting Opportunities for Low-Income Persons, the Contractor shall participate in CMHA's Section 3 Program.
- 18.2.** 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.
- 18.2.1.** 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.
- 18.3.** The parties to this Contract agree to comply with HUD's regulations in [24 CFR](#), which implement Section 3.
- 18.3.1.** As evidence by the execution of the Contract, the parties to this Contract certify that they are under no contractual or other impediments that would prevent them from complying with the regulations.
- 18.4.** 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 narrative advising the labor organization or workers' representative of the Contractor's commitments, and will post copies of this notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice.
- 18.4.1.** The notice shall describe the preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work will begin.
- 18.5.** The Contractor agrees to include ARTICLE XVIII SECTION 3 in every subcontract subject to compliance with regulations in [24 CFR](#), and agrees to take appropriate action, as provided in an applicable provision of the Subcontract or in ARTICLE XVIII SECTION 3, upon a finding that the Subcontractor is in violation of the regulations in [24 CFR](#).
- 18.5.1.** 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](#).
- 18.6.** 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](#) require employment opportunities to be directed, were not filled to circumvent the Contractor's obligations under [24 CFR](#).
- 18.7.** Noncompliance with HUD's regulations in [24 CFR](#) may result in sanctions, termination of this Contract for default, and debarment or suspension from future HUD assisted contracts.
- 18.8. Section 3 Reporting Requirements**
- 18.8.1.** Monthly Section 3 Compliance Reports are to be submitted to the Economic Inclusion Coordinator.
- 18.8.2.** These reports should include a listing of the Contractor's current local workforce, any new hiring or subcontracting that has occurred, along with identifying information on all new hires and all subcontractors.
- 18.9.** The Contractor shall cooperate fully with requests for additional Section 3 information and documentation **as needed by** CMHA or the Contracting Authority.

19. ARTICLE XIX LABOR STANDARDS

19.1. Compliance with [Davis Bacon and Related Acts](#) requirements

19.1.1. All rulings and interpretations of the [Davis Bacon and Related Acts](#) contained in 29 CFR are herein incorporated by reference in this Contract.

19.2. Minimum Wages

19.2.1. 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, 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.

- A. Contributions made or costs reasonably anticipated for bona fide fringe benefits under 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](#); 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.
- B. 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](#).
- C. 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.
- D. The wage determination (including any additional classification and wage rates conformed under [29 CFR](#) 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.

19.2.2. 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.

- A. HUD shall approve any additional classification and wage rate and fringe benefits therefor only when all the following criteria have been met:
 - i. The work to be performed by the classification requested is not performed by a classification in the wage determination;
 - ii. The classification is utilized in the area by the construction industry; and
 - iii. The proposed wage rate, including bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- B. 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.
 - i. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within thirty (30) calendar 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.
- C. 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.

- i. The Administrator or an authorized representative, will issue a determination within thirty (30) calendar 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 was necessary.

- D. The wage rate (including fringe benefits where appropriate) 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.

19.2.3. 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.

19.2.4. 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.

- A. 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.

19.3. Withholding of Funds

19.3.1. 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.

- A. 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.

- B. HUD or its designee may, after written notice to the Contractor or Subcontractor, issue payment to the respective employees to whom they are due.

19.4. Payrolls and Basic Records

19.4.1. 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.

- A. Such records shall contain:

- i. The name, address, and social security number of each such worker;
- ii. His or her correct classification
- iii. Hourly rates of wages paid
 - (a) Including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in the [Davis-Bacon Act](#);
- iv. Daily and weekly number of hours worked;
- v. Deductions made; and
- vi. Actual wages paid.

- B. Whenever the Secretary of Labor has found, under [29 CFR](#), 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 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.

- i. 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.

19.4.2. The Contractor shall submit 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.

- A.** The payrolls submitted shall set out accurately and completely all of the information required to be maintained.
- B.** This information may be submitted in any form desired.
 - i. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.
- C.** 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).
 - i. 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 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 from the full wages earned, other than permissible deductions as set forth in [29 CFR](#); 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 in to the Contract.
 - ii. 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".
 - iii. The falsification of any of the above certifications may subject the Contractor or Subcontractor to civil or criminal prosecution under Title 18 and Title 31 of the United States Code.

19.4.3. Records

- A.** The Contractor or Subcontractor shall make the records 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.
- B.** 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.
- C.** 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](#).

19.5. Apprentices & Trainees

19.5.1. Apprentices will be permitted to work at less than 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 ninety (90) calendar 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.

- A.** 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.

- i. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.
 - ii. 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.
- B. Where a Contractor is performing construction on a project in a locality other than that in which 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.
- C. 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.
 - i. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program.
 - ii. 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.
 - iii. 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.
- D. 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.

19.5.2. Trainees

- A. Except as provided for in [29 CFR](#), 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.
- B. 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.
- C. 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.
 - i. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program.
 - ii. 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.
 - iii. 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.
 - iv. 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.
- D. 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 until an acceptable program is approved.

19.5.3. Equal Employment Opportunity

- A. The utilization of apprentices, trainees, and journeymen shall be in conformity with the equal employment opportunity requirements of [Executive Order 11246, as amended](#) and [29 CFR](#).

19.6. Compliance with Copeland Act requirements

19.6.1. The requirements of [29 CFR](#), which are hereby incorporated by reference in this Contract

19.7. Contract Termination; Debarment

19.7.1. A breach of ARTICLE XIX LABOR STANDARDS may be grounds for termination of the Contract and for debarment as a Contractor and a subcontractor.

19.8. Disputes Concerning Labor Standards

19.8.1. Disputes arising out of the labor standards provisions of Disputes Concerning Labor Standards shall not be subject to ARTICLE XI DISPUTE RESOLUTION/CLAIM PROCEDURE of this contract.

A. Such disputes shall be resolved in accordance with the procedures of the Department of Labor.

19.8.2. Disputes within the meaning of Disputes Concerning Labor Standards include disputes between the Contractor (or any of its Subcontractors) and CMHA, HUD, the U.S. Department of Labor, or the employees or their representatives.

19.9. Certification of Eligibility

19.9.1. 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 virtue of the [Davis-Bacon Act](#) or [29 CFR](#).

19.9.2. 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 the [Davis-Bacon Act](#) or [29 CFR](#).

19.9.3. The penalty for making false statements is prescribed in the U. S. Criminal Code [18 U.S.C.](#)

19.10. Contract Work Hours and Safety Standards Act

19.10.1. As used in 19.10 - Contract Work Hours and Safety Standards Act, the terms "laborers" and "mechanics" include watchmen and guards.

19.10.2. Overtime Requirements

A. 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 pay for all hours worked in excess of 40 hours in such workweek.

19.10.3. Violation; liability for unpaid wages; Liquidated Damages

A. In the event of any violation, the Contractor and any Subcontractor responsible therefor shall be liable for the unpaid wages.

B. 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.

C. Such liquidated damages shall be computed with respect to each individual laborer or mechanic (including watchmen and guards) employed in violation, in the sum of \$10 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.

19.10.4. Withholding for unpaid wages and liquidated damages

A. 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.

19.11. Subcontracts

19.11.1. The Contractor or Subcontractor shall insert in any Subcontracts all the provisions contained in Subcontracts, 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.

19.11.2. The prime Contractor shall be responsible for the compliance by any Subcontractor or lower tier Subcontractor with all these provisions.

19.12. Non-Federal Prevailing Wage Rates

19.12.1. 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:

- A.** The applicable wage rate determined by the Secretary of Labor pursuant to the [Davis-Bacon Act \(40 U.S.C.\)](#) 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.

20. ARTICLE XX HEALTH, SAFETY AND ACCIDENT PREVENTION

20.1. General Contractor Requirements

20.1.1. In performing this Contract, the Contractor shall:

- A.** Take reasonable precautions to ensure safety of individuals on the Project;
- B.** 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;
- C.** Protect the lives, health, and safety of other persons;
- D.** Prevent damage to property, materials, supplies, and equipment; and
- E.** Avoid work interruptions.

20.1.2. For these purposes, the Contractor shall:

- A.** Comply with regulations and standards issued by the Secretary of Labor .
 - i.** Failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act; and
- B.** Include the terms of ARTICLE XX HEALTH, SAFETY AND ACCIDENT PREVENTION in every Subcontract that such terms will be binding on each Subcontractor.
- C.** The Contractor shall be responsible for its Subcontractors' compliance with the provisions of ARTICLE XX HEALTH, SAFETY AND ACCIDENT PREVENTION.
 - i.** The Contractor shall take such action with respect to any Subcontract as CMHA, the Secretary of Housing or Secretary of Labor shall direct as a means of enforcing such provisions.
- D.** 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 diseases or damages to property, materials, supplies, or equipment, and shall report this data in the manner prescribed by [29 CFR](#);
- E.** The Contractor shall pay any fine or cost incurred because of Contractor's violation, or alleged violation, of any Applicable Law.

20.2. Notification of Non-Compliance Procedure

20.2.1. To the extent CMHA is aware of Contractor's noncompliance with the safety requirements in the Contract, CMHA shall notify the Contractor of any noncompliance with these requirements and of the corrective action required. However, CMHA's failure to notify Contractor of noncompliance with any applicable safety requirements, does not relieve Contractor of any obligation to comply with safety requirements for the Project.

- A.** 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.

20.2.2. After receiving the notice, the Contractor shall immediately take corrective action.

20.2.3. If the Contractor fails or refuses to take corrective action promptly, CMHA may issue an order stopping all or part of the work until satisfactory corrective action has been taken.

20.2.4. The Contractor shall not base any claim or request for equitable adjustment for additional time or money on any stop order issued under Section 20.2.

20.3. Safety Plan

20.3.1. The Contractor is responsible for designing and implementing its own site-specific safety plan, including compliance with OSHA regulations and such plan shall meet or exceed CMHA's site-specific safety plan (if any).

20.3.2. Before starting any Work, the Contractor shall submit to CMHA a copy of the Contractor's site-specific safety plan and safety manuals.

20.4. Safety Data Sheets

20.4.1. The Contractor shall identify any material it uses at the Site with a Safety Data Sheet ("SDS") meeting the requirements of OSHA's Hazardous Communication Standard.

20.4.2. The Contractor shall maintain a notebook containing all of its applicable SDSs.

- A.** This notebook shall be kept at the Site for the duration of the Project.

20.5. Hazardous Materials

20.5.1. Prohibition Against Hazardous Materials

- A. The Contractor shall not introduce Hazardous Materials to the Project

20.5.2. Work Stoppage Due to Hazardous Materials

- A. If the Contractor encounters material the Contractor reasonably believes to be, or contain, a Hazardous Material that has not been rendered harmless, the Contractor shall immediately stop Work in the affected area and verbally report the condition to CMHA, and within one (1) business day deliver written notice of the condition to CMHA.
- B. CMHA will promptly determine the necessity of CMHA retaining a qualified environmental consultant to evaluate the suspected Hazardous Material and to issue a related written report.
 - i. Where appropriate, CMHA will engage a licensed abatement contractor to remove the material or render it harmless as directed.
- C. The Contractor shall resume Work in the affected area upon written notice from CMHA that:
 - i. The suspect material was evaluated and found not to be or contain a Hazardous Material; or
 - ii. The suspect material has been removed or rendered harmless.
- D. If the Contractor knowingly or negligently proceeds with the Work in an area where a Hazardous Material exists and has not been rendered harmless, the Contractor shall be solely responsible for all related claims, damages, losses, and expenses, including, but not limited to, attorneys' fees, arising out of or resulting from performing the Work in the affected area. Further, to the fullest extent permitted by Laws and Regulations, Contractor shall indemnify, defend and hold harmless CMHA, from and against all claims, costs, losses, and damages, including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs, associated with Contractor knowingly or negligently proceeds with the Work in an area where a Hazardous Material exists and has not been rendered harmless.
- E. The term "rendered harmless" means that the level of exposure is less than any applicable exposure standards set forth in Applicable Law.

20.6. Fires or Hot-Work

20.6.1. Contractor shall not burn any fires on the Site(s).

- A. The Contractor shall notify the Project Manager twenty-four (24) hours before the start of non-routine or non-recurring hot-work.
 - i. Use of sources of fire, flame or sparks and flammable materials shall be kept to an absolute minimum.
 - ii. At the beginning of the Project, the Contractor shall inform the Project Manager of its intent to use blowtorches, welding apparatus or similar exposed flame and sparking devices.
 - iii. Similar notice shall be given in regard to the use of flammable liquids, adhesives, and cleaners.
- B. The Contractor shall furnish an appropriate number of fire extinguishers (minimum of 1), which shall be within the immediate areas where work is being done at all times.
 - i. The extinguisher shall be adequate and suitable for the class of fire likely to be caused by the Contractor's operations.

20.7. Explosives and Blasting

- 20.7.1.** The Contractor shall not conduct blasting on, or bring explosives to the Work Site without written approval of CMHA and other authorities with jurisdiction.
- 20.7.2.** The Contractor shall perform all blasting, storing, and handling of explosives as required under Applicable Law.
- 20.7.3.** The Contractor shall carry appropriate liability insurance coverage, as required by the Contract Documents, for its blasting and explosives storage and handling operations.
 - A. Immediately upon request, the Contractor shall deliver evidence of that insurance to CMHA.

21. ARTICLE XXI CONTRACT DOCUMENTS AND CONTRACT RECORDS

21.1. Examination and Retention of Contractor's Records

- 21.1.1.** CMHA, HUD, or the Comptroller of the United States, or any of their duly authorized representatives shall, until three (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.
- 21.1.2.** The Contractor agrees to include in first-tier Subcontracts under this Contract a clause substantially the same as 21.1.1.
- A.** "Subcontract," as used in Examination and Retention of Contractor's Records, excludes purchase orders not exceeding \$10,000.
- 21.1.3.** The periods of access and examination for records relating to (1) appeals under ARTICLE XI DISPUTE RESOLUTION/CLAIM PROCEDURE 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 CMHA, 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.
- 21.1.4.** To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify, defend and hold harmless CMHA, from and against all claims, costs, losses, and damages, including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs, arising out of or related to any dispute regarding what Person or Persons should be given access to the documents under Section 21.1.
- 21.1.5.** The right of inspection, audit, and reproduction extends to all documents necessary to permit CMHA, or its agents, to perform a complete evaluation of all of the Contractor's costs related to the Project, including, but not limited to, the cost of pricing data submitted along with the computations and projections used therein.
- 21.1.6.** If the Contract has been terminated, in whole or in part, the records relating to the Work terminated shall be made available to CMHA for a period of six (6) years from the date of termination.

21.2. Examination and Audit of Contractor's Records

- 21.2.1.** CMHA may examine all books, records, documents and other data of the Contractor and its Subcontractors related to the bidding, pricing, or performance of the Work for any purpose, including, but not limited to, evaluating any Contractor Payment Request, Proposal, Modification, or Claim.
- 21.2.2.** The above referenced materials shall be made available at the office of the Contractor or Subcontractor, as applicable, at all reasonable times for inspection, audit, and reproduction until the expiration of six (6) years after the date of Substantial Completion of all Work.
- A.** The Contractor shall maintain, and require its Subcontractors to maintain, complete and accurate business records at its principal place of business.
- i.** If the principal place of business is greater than 50 miles from the Site, the Contractor shall timely make records available, and shall require its Subcontractors to timely make records available, at the office of CMHA upon request for the records.
- B.** To the extent that the Contractor or Subcontractor, as applicable, informs CMHA in writing that any documents provided to CMHA are trade secrets, CMHA shall treat these documents, to the extent permitted by law, as trade secrets of the Contractor or Subcontractor, as applicable.
- i.** To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify, defend and hold harmless CMHA, from and against all claims, costs, losses, and damages, including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs, arising out of or related to any dispute regarding what Person or Persons should be given access to the documents under Section 21.2.
- 21.2.3.** The right of inspection, audit, and reproduction extends to all documents necessary to permit adequate evaluation of the cost of pricing data submitted along with the computations and projections used therein.
- 21.2.4.** If the Contract has been terminated, in whole or in part, the records relating to the Work terminated shall be made available to CMHA for a period of six (6) years from the date of termination.

21.2.5. Records that relate to disputes, litigation, or settlement of Claims arising out of the performance of the Work shall be made available until the dispute, litigation or Claims have been finally decided or settled.

21.3. Ownership of Contract Documents

21.3.1. CMHA shall have exclusive ownership of, all proprietary interest in, and the right to full and exclusive possession of all information, materials and documents discovered or produced by Contractor pursuant to the terms of this Contract, including but not limited to reports, memoranda, drawings or letters concerning the research and reporting tasks of this Contract.

21.3.2. For data other than computer software, the Contractor grants to CMHA and others acting on its behalf, a paid-up, nonexclusive, irrevocable, world-wide license in such copyrighted data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly by or on behalf of CMHA.

21.3.3. CMHA alone owns the Contractor's Documents and the Contract Documents and every right, title, and interest therein.

21.3.4. The Contractor must execute and deliver and cause its agents and subcontractors to execute and deliver, to CMHA any transfers, assignments, documents or other instruments necessary to vest in CMHA the complete right, title, interest in and ownership of the Contractor's Documents.

21.3.5. The Contractor may retain copies of the Contractor's Documents and the Contract Documents for information, reference, and performance of the Work.

21.3.6. The submission or distribution of the Contractor's Documents or the Contract Documents to meet official regulatory requirements or for similar purposes in connection with the Project is not a waiver of CMHA's reserved rights in the Contractor's Documents.

A. Any unauthorized use of the Contractor's Documents or the Contract Documents shall be at the sole risk of the entity making the unauthorized use.

21.4. Intent of Contract Documents

21.4.1. The intent of the Contract Documents is to include all items necessary for the proper execution and completion of Work by the Contractor.

21.4.2. The Contract Documents are complementary, and what is required by one is binding as if required by all.

21.4.3. The Contractor shall provide all labor materials necessary for the entire completion of the Work described in the Contract Documents and reasonably inferable to produce the intended results.

21.4.4. The Drawings govern dimensions, details, and location of the Work.

A. The Specifications govern the quality of materials and workmanship.

21.4.5. The organization of the Specifications in divisions, sections, and articles, and the arrangement of Drawings shall not restrict the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

21.4.6. Unless otherwise defined in the Contract Documents, words that have well known technical or construction industry meanings are used within those recognized meanings.

21.5. Use of Electronic Files

21.5.1. CMHA and Contractor reasonably expect that they will provide Electronic Files to each other to facilitate the design and construction of the Project consistent with current practices and customs in the construction industry.

21.5.2. CMHA and Contractor acknowledge that the use of Electronic Files involves risks not generally associated with the use of paper documents.

A. Those risks may include, but not be limited to, alteration (inadvertent or intentional) and deterioration, both of which may not be apparent through casual observation.

21.5.3. In the event of a discrepancy between information contained in a paper version of a document and the Electronic File of that document, the paper will govern.

21.5.4. Use of Electronic Files does not relieve the Contractor of its responsibility for the preparation, completeness, or accuracy of the Contractor's Documents.

21.6. Order of Precedence

21.6.1. In the event of any inconsistency or conflict within any of the Contract Documents, the Contractor shall provide the better quality of Work and comply with the stricter requirement.

21.6.2. 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.

A. In the event of such a conflict, applicable federal law, regulation, and Executive Order shall prevail.

22. ARTICLE XXII MISCELLANEOUS

22.1. Assignment

22.1.1. The Contractor shall not assign or transfer any interest in this Contract; except that Claims for monies due or to become due from CMHA under the Contract may be assigned to a bank, trust company, or other financial institution.

A. Such assignments of claims shall only be made with the written concurrence of CMHA.

B. 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 CMHA.

22.1.2. Assignment of Antitrust Claims:

A. By signing the Agreement, the Contractor assigns, conveys and transfers to CMHA any right, title, and interest to any claims or causes of action it may have or acquire under state or federal antitrust laws relating to any goods, products, or services purchased, procured, or rendered to CMHA pursuant to the Contract.

22.1.3. CMHA and Contractor each bind themselves, their successors, assigns and legal representatives, to the other party to this Contract and to the successors, assigns, and legal representatives of the other party with respect to the Contract.

22.2. Contractor Performance Evaluation

22.2.1. CMHA may evaluate the Contractor's Performance at any time including without limitation during the progress of the Work, at the completion of a phase of the Project, and/or completion of the Project.

22.2.2. CMHA shall retain the evaluation.

A. The Contractor may request a copy of the completed evaluation(s).

i. If the Contractor wishes to comment or take exception to any rating or remark, the Contractor must send a response in writing to CMHA within thirty (30) calendar days of Contract Completion and/or Termination.

B. CMHA may use the evaluation(s) in determining the responsibility of the Contractor for award of future contracts.

C. Poor evaluations may lead to a determination that Contractor is not responsible and therefore ineligible for award of future contracts for a period of not less than one year.

D. CMHA may request information from the Contractor for use in evaluating the A/E's performance.

i. If information is requested, the Contractor shall comply in a timely and responsive manner.

E. If a breach of the Contract is committed by the Contractor or is attributable to a Subcontractor, that breach will be used in the responsibility analysis of the Contractor and Subcontractor (where applicable) for future contracts or subcontracts for a period of five (5) years after the date of the breach unless said breach results in Contractor being placed on debarment list, then for the period provided therein.

22.3. Prohibition Against Liens

22.3.1. The Contractor is prohibited from placing a lien on CMHA's property.

A. This prohibition shall apply to all Subcontractors at any tier and all materials suppliers.

22.4. Conflict of Interest

22.4.1. Interest of Members of Congress

A. 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.

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

A. No member, officer, or employee of CMHA, 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 CMHA 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.

22.5. Limitation on Payments Made to Influence Certain Federal Financial Transactions

22.5.1. The Contractor agrees to comply with Title 31, United States Code which prohibits the use of 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:

- A. The awarding of any Federal contract;
- B. The making of any Federal grant;
- C. The making of any Federal loan;
- D. The entering into of any cooperative agreement; or
- E. The modification of any Federal Contract, grant, loan, or cooperative agreement.

22.5.2. 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.

22.6. Procurement of Recovered Materials

22.6.1. In accordance with 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) [40 CFR](#) that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition.

- A. 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:
- i. Are not reasonably available in a reasonable period of time;
 - ii. 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
 - iii. Are only available at an unreasonable price.

22.6.2. 22.6.1 shall apply to items purchased under this contract where:

- A. The Contractor purchases in excess of \$10,000 of the item under this contract; or
- B. During the preceding:
 - 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.

22.7. Royalties and Patents

22.7.1. The Contractor shall pay all royalties and license fees and assume all costs incident to the use, in the performance of the Work or the incorporation in the Work, of any design, inventions, process, product, or devise that is the subject of patent rights or copyrights held by others.

- A. Contractor shall defined all suits or claims for infringement of any patent rights or copyrights and shall save CMHA harmless from loss on account thereof; except that CMHA 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.
- B. If, however, the Contractor has reason to believe that any design, process or product specified is an infringement of a patent or copyright, the Contractor shall promptly notify the Contracting Officer.
 - i. Failure to give such notice shall make the Contractor responsible for resultant loss.

22.8. Contract Time for Substantial Completion

22.8.1. The Contractor shall have the Work Substantially Complete within 90 calendar days of the date for commencement of the Work established in the Notice to Proceed issued by CMHA. If a Notice to Proceed is not issued, the date for commencement of the Work shall be the effective date of the Contract.

22.9. Other Contracts

22.9.1. CMHA may undertake or award other contracts for additional work at or near the site of the Work under this contract.

22.9.2. The Contractor shall fully cooperate with the other contractors and with CMHA 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 CMHA.

22.9.3. The Contractor shall not commit or permit any act that will interfere with the performance of work by any other contractor or by CMHA employees.

22.10. Drug-Free Workplace

22.10.1. Each contractor shall be enrolled in and in good standing and shall require all subcontractors with whom the Contractor is in contract for the public improvement to be enrolled in and be in good standing in the Bureau of Workers' Compensation's Drug-Free Workplace Program or a comparable program approved by the Bureau that meets the requirements specified in the Revised Code prior to a subcontractor providing labor at the Project site of the public improvement.

22.11. Energy Efficiency and Sustainability Requirements

22.11.1. 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 for the State in which the work under the contract is performed.

22.11.2. If the Project is designed and constructed under the Leadership in Energy and Environmental Design ("LEED") Rating System developed by the U.S. Green Building Council or another rigorous rating system used to facilitate achievement of sustainability goals for the Project, the Contractor shall provide submittals certifying achievement of sustainable designed rating system criteria for verification by the Green Building Certification Institute or other third party in accordance with the Contract Documents.

22.12. Clean Air and Water

22.12.1. The Contractor shall comply with the Clean Air Act, as amended [42 USC](#), the Federal Water Pollution Control Water Act, as amended [33 U.S.C.](#), and standards issued pursuant thereto in the facilities in which this Contract is to be performed.

22.13. Public Relations

22.13.1. Public relations or publicity about the Project shall be solely within the control of and consent of CMHA.

22.13.2. Contractor shall submit to CMHA all advertising and publicity related matter relating to this Contract, including without limitation, information provided in social media, wherein CMHA's name is mentioned or language used from which the connection of CMHA's name may, in CMHA's judgment, be inferred or implied.

A. Contractor shall not publish or use such advertising and publicity matters without prior express written consent of CMHA.

22.14. Governing Law

22.14.1. This Contract shall be governed and construed exclusively by its terms and by the laws of the State of Ohio and any suit filed to enforce any term of this Contract shall be filed only in a court of competent jurisdiction in Hamilton County, Ohio.

22.14.2. The parties to this Contract shall comply with applicable law.

22.15. Written Notice

22.15.1. Notice under the Contract Documents shall be validly given if:

A. Delivered personally to a member of the organization for whom the notice is intended.

22.16. Taxes

22.16.1. Parties acknowledge that CMHA is a tax exempt entity and Contractor must use tax exemption status for all purchases made for the Project in which tax exemption is permitted under law.

22.17. Computing Time

22.17.1. When the Contract Documents refer to a period of time by a number of days, the period shall be computed to exclude the first and include the last day of the period.

A. If the last day of the period falls on a Saturday or Sunday, or a legal holiday, that day shall be omitted from the computation and the period shall end on the next business day.

22.17.2. Except as excluded, the Contract Times and all other periods referred to in the Contract Documents includes Saturdays, Sundays, and all days defined as legal holidays below.

22.17.3. The standard workdays for the Work are Monday through Friday, excluding legal holidays.

22.17.4. The Legal Holidays are as follows:

- A. New Year's Day
- B. Martin Luther King Jr. Day
- C. President's Day
- D. Memorial Day
- E. Independence Day
- F. Labor Day
- G. Columbus Day
- H. Veterans Day
- I. Thanksgiving Day
- J. Christmas Day

22.18. Time is of the Essence

22.18.1. All time limits set forth in the Contract Documents are of the essence.

- A. By signing this Contract, Contractor acknowledges that the Contract Times are reasonable, taking into consideration the usual weather and other conditions prevailing in the locality of the Project.
- B. By signing the Construction Progress Schedule, the Contractor acknowledges that the specified Milestone dates and the Date for Substantial Completion are reasonable, taking into consideration the usual weather and other conditions prevailing in the locality of the Project.

22.18.2. The Notice to Proceed establishes the date for commencement of the Work.

22.18.3. The Contractor acknowledges that it may be subject to interference, disruption, hindrance, or delay in the progress of the Work from any cause.

- A. The sole remedy for such interference, disruption, hindrance, or delay shall be an extension of the Contract Time MODIFICATIONS, unless otherwise required by law.

22.19. Extent of Contract

22.19.1. The Contract Documents represent the entire and integrated agreement between CMHA and the Contractor and supersede all prior negotiations, representations, or agreement, either written or oral.

22.19.2. This Contract may be executed in any number of counterparts, each of which shall be regarded as original and all of which constitute but one and the same instrument.

22.19.3. The captions and headings in this Contract are for convenience only and in no way define, limit, or describe the scope or intent of any of the provisions or sections hereof.

22.20. Severability

22.20.1. If any provision of this Contract is determined by a court having jurisdiction to be unenforceable to any extent, the rest of the provisions of this Contract will remain enforceable to the fullest extent permitted by law.

22.21. Facsimile/Electronic Mail Signature

22.21.1. Any party hereto may deliver a copy of its counterpart signature page of any Contract Documents via email, fax, or web-based project management software.

22.21.2. Each party shall be entitled to rely upon a scanned or facsimile signature of the other party in such a manner as if such a signature were an original.

22.22. No Third Party Interest

22.22.1. Except as expressly provided herein, no person or entity, other than CMHA and Contractor, will have any right or interest under the Contract, and the Contract does not create a contractual relationship of any kind between any persons or entities other than CMHA and the Contractor.

22.23. No Waiver

22.23.1. The failure of CMHA or Contractor to insist on anyone or more instances upon strict performance of any one or more of the provisions of the Contract or to exercise any rights under the Contract or provided by law will not be construed as a waiver or relinquishment of that provision or of the right to subsequently demand strict performance or exercise the right and the rights will continue unchanged and remain in full force and effect.

22.24. Assignment of Antitrust Claims

22.24.1. By signing this Contract, the Contractor conveys, assigns and transfers to CMHA any right, title, and interest in any claims or causes of action it may have or acquire under state or federal antitrust laws relating to any goods, products, or services purchased, procured, or rendered to CMHA pursuant to this Contract.

22.25. Survival of Obligations

22.25.1. All representations, indemnity obligations, warranties, guarantees, and other expressed continuing obligations under the Contract, will survive final payment, completion and acceptance of the Work, and termination or completion of the Contract.

22.26. Force Majeure

22.26.1. Neither party shall be liable for failure to perform if such failure is caused by conditions beyond its control including, but not limited to, Acts of God, Government restrictions (including the denial or cancellation of any export or other necessary license), wars, and/or insurrections.

22.27. Privacy

22.27.1. The Contractor agrees to Comply with the [Privacy Act of 1974](#) (the Act) and the agency rules and regulations issued under the Act and any Personal information collected, used, or acquired in connection with this Contract shall be protected against unauthorized use, disclosure, modification or loss.

22.27.2. Contractor shall ensure that its directors, officers, employees, subcontractors or agents use personal information solely for the purposes of accomplishing the services set forth herein.

22.27.3. Contractor agrees not to release, divulge, publish, transfer, sell or otherwise make known to unauthorized persons personal information without express written consent of CMHA or otherwise required by law.

22.27.4. Contractor agrees to indemnify and hold harmless CMHA for any damages related to Contractor's unauthorized use of personal information.

22.28. Contractor Status

22.28.1. It is understood that the Contractor is an independent contractor and is not to be considered an employee of CMHA, or assume any right, privilege or duties of an employee.

23. ARTICLE XXIII DEFINITIONS AND TERMINOLOGY

23.1. Whenever used in the Contract Documents, the terms listed below will have the meanings meaning ascribed which are applicable to both the singular and the plural and the male and female gender thereof:

23.1.1. Abandonment

- A. A willful decision by the Contractor suspending the progress of the work for an uninterrupted period of three (3) or more consecutive days (excluding weekends and holidays) and such suspension was not requested by CMHA and not caused by natural occurrences or acts of God.

23.1.2. Acceptable Component

- A. A component listed in the Specifications after the Basis of Design Component.

23.1.3. Addenda

- A. Written or graphic instruments issued prior to the opening of Bids that clarify, correct, or change the Bidding requirements or the Contract Documents.

23.1.4. Agreement

- A. The form provided by CMHA, including all of its exhibits, that, when completed and signed by the Contractor and CMHA is evidence of the execution of the Contract.

23.1.5. Allowance

- A. An amount budgeted for during the Bidding process for an item that has yet to be specified or defined and for which no exact dollar amount is available.

23.1.6. Alternate

- A. A change in the proposed Project scope, which may include alternate materials or methods of construction and an amount stated on the Bid form to be added or deducted from the Base-Bid if the corresponding Alternate is incorporated into the Contract.

23.1.7. Applicable Law

- A. All federal, state, and local codes, statutes, ordinances, and regulations that apply to the performance of the Work.

23.1.8. Architect/Engineer (A/E)

- A. The person or other entity engaged by the CMHA to perform architectural, engineering, design, and other services related to the work as provided for in the Contract.
- B. When CMHA uses an engineer to act in this capacity, the terms “architect” and “engineer” shall be synonymous.

23.1.9. Asbestos

- A. Any material that contains more than one percent (1%) asbestos fiber and is friable or is releasing asbestos fibers into the air above current action levels established by OSHA

23.1.10. As-Built Documents

- A. Drawings, addenda, Specifications, executed Change Orders and other elements of the Contract Documents which the Contractor annotates and otherwise modified to indicate changes made during the construction process, the location of concealed and buried items, and other information useful to CMHA throughout the life of the completed Project.

23.1.11. Base-Bid

- A. The amount stated in a Bid as the sum for which the Bidder offers to perform the Work in a particular trade or other category, which is described in the Contract Documents, excluding Alternates.

23.1.12. Basis of Design

- A. A document that records the concepts, calculations, decisions, and product selections used to meet CMHA’s Project Requirements and to satisfy applicable regulatory requirements, standards, and guidelines.
- B. The document includes both narrative descriptions and lists of individual items that support the design process.

23.1.13. Basis of Design Component

- A. A component listed first in the Specifications.

23.1.14. Bid

- A. The written offer of a Bidder submitted on the prescribed CMHA Bid Form setting forth the prices for the Work to be performed.

23.1.15. Bidder

- A. The person that submits a Bid.

23.1.16. Bid Form

- A. A form furnished by CMHA with the proposed Contract Documents that is to be completed, signed, and submitted containing the Bidder's Bid.

23.1.17. Bid Guaranty

- A. A bid bond or other instrument of security authorized by [24 CFR](#) submitted with the Bid to provide assurance that the Bidder will execute the Agreement.

23.1.18. Bond

- A. Bid, performance and payment bonds and other instruments of security submitted by the Contractor to assure that the Contractor will perform the Work of the Contract, including making payment to Subcontractors and Material Suppliers.

23.1.19. Building Information Model (BIM)

- A. A digital representation of physical and functional characteristics of a facility and a shared knowledge resource for information about a facility forming a reliable basis for decisions during its life-cycle; defined as existing from earliest conception to demolition.
 - i. It describes the process of designing a building collaboratively using one coherent system of computer models rather than as separate sets of drawings.

23.1.20. Building Permit

- A. The term building permit as used in the Contract Documents shall mean any and all permits required to comply with local and state building codes.

23.1.21. Certificate of Completion or Certificate of Contract Completion

- A. A form, issued by CMHA, that documents the Contractors achievement of Contract Completion.

23.1.22. Certificate of Substantial Completion

- A. A form, issued by CMHA, which is used to document:
 - i. That the Contractor has achieved Substantial Completion of the Work or a designated portion of the Work; and
 - ii. The date on which the associated Substantial Completion of the Work was achieved.

23.1.23. Change Order

- A. A document recommended by the A/E and executed by CMHA and the Contractor that modifies the Contract and authorizes an addition, deletion, or revision in the work and an adjustment in the Contract Sum or the Contract Time or both.

23.1.24. Change Order Request

- A. A CMHA prescribed form issued after execution of the Contract requesting a Change Order from the Contractor(s), which may initiate a Change Order to modify the Contract.

23.1.25. Claim

- A. A demand or assertion, initiated by written notice as prescribe in the Contract Documents, by the Contractor or CMHA seeking an adjustment of Contract Sum or Contract Time or both, or other relief with respect to the terms of the Contract.

23.1.26. Claim Affidavit

- A. A sworn document used in conjunction with filing a lien, which contains a claim on the funds that are due to a Contractor, in favor of a person supplying labor, materials or services for the value of labor, materials, or services supplied.

23.1.27. Construction

- A. The term used to include new construction, reconstruction, renovation, restoration, rehabilitation, major repair, demolition and all similar work upon buildings and ancillary facilities, including any draining, dredging, grading or similar work upon real property.

23.1.28. Construction Progress Schedule

- A. The critical path schedule for performance of the Contract; showing the time for completing the Work within the Contract Times; the planned sequence for performing the various components of the Work; the interrelationship between the activities of the Contractor, A/E, and CMHA; and the Contractor's resource and cost loading information; as periodically updated during the performance of the Work.

23.1.29. Contract

- A. The contract entered into between the Contractor and CMHA.
- B. It includes:
 - i. The Bid;
 - ii. The Bid Bond;
 - iii. The Performance and Payment Bond or Bonds or other assurance of completion;
 - iv. The Certifications, Representations, and Other Statements of Bidders;
 - v. The HUD General Conditions of the Contract for Construction;
 - vi. The CMHA Construction Contract General Terms and Conditions;
 - vii. The applicable wage rate determinations from the U.S. Department of Labor;
 - viii. Any special conditions included elsewhere in the contract;
 - ix. The specifications; and
 - x. Drawings
- C. It includes all formal changes to any of those documents by addenda, Change Order or modification.

23.1.30. Contract Documents

- A. Collectively, the documents that constitute the substance of the Contract including, but not limited to:
 - i. The Bid;
 - ii. The Bid Bond;
 - iii. The Performance and Payment Bond or Bonds or other assurance of completion;
 - iv. The Certifications, Representations, and Other Statements of Bidders;
 - v. The HUD General Conditions of the Contract for Construction;
 - vi. The CMHA Construction Contract General Terms and Conditions;
 - vii. The applicable wage rate determinations from the U.S. Department of Labor;
 - viii. Any special conditions included elsewhere in the contract;
 - ix. The specifications; and
 - x. Drawings
- B. It includes all formal changes to any of those documents by addenda, Change Order or modification.

23.1.31. Contract Commencement Date

- A. The date established in the Notice to Proceed issued by CMHA to the Contractor to mark the start of the Work and the beginning of the running of the Contract Time. If a Notice to Proceed is not issued, the Contract Commencement Date shall be the effective date of the Contract.

23.1.32. Contract Completion Date

- A. The date by which the Work must be finally complete
- B. The Contract Completion Date is established in Section 9.8 herein.

23.1.33. Contract Sum

- A. The Contractor's entire compensation for the Contractor's proper, timely, and complete performance of the Work and is subject to adjustment as provided in the Contract.

23.1.34. Contract Time

- A. The periods stipulated in the Agreement for the achievement of associated Milestones and Substantial Completion, in consecutive days, beginning on the date established by the Notice to Proceed, including adjustments authorized by executed Change Orders.

23.1.35. Contractor

- A. The person or other entity entering into the Contract with CMHA to perform all of the work required under the Contract.

23.1.36. Contractor Payment Application Request

- A. The form furnished by CMHA that is to be used by the Contractor in requesting payments and which, when signed by the Contractor, shall serve as an affidavit that payments requested are in proportion to the Work completed as shown on the Schedule of Values.

23.1.37. Contractor's Documents

- A. All Project-related documents, including those in electronic form, prepared by the Contractor and its Subcontractors.

23.1.38. Contractor's Fee

- A. The portion of the Contract Sum attributable to the aggregate of the Contractor's profit and home-office overhead related to the Contractor's proper, timely, and complete performance of the Work.

23.1.39. Contractor's Punch List

- A. A document prepared by the Contractor that consists of a list of items of Work to be completed or corrected by the Contractor as a condition precedent to Contract Completion.

23.1.40. Coordination Drawings

- A. Drawings and Electronic Files prepared by the Contractor to demonstrate how multiple-system and interdisciplinary work will be coordinated.
- B. Clash reports generated by BIM authoring software may be included in the Coordination Drawing submittals if applicable.

23.1.41. Correction Period

- A. A period of one-year commencing on the date of Substantial Completion of the Work or a designated portion of the Work which CMHA has agreed to take Partial Occupancy.

23.1.42. Day

- A. A calendar day of twenty-four (24) hours measured from midnight to midnight, unless otherwise expressly specified to mean a business day.

23.1.43. Defective Work

- A. Work that:
 - i. Does not conform to the Contract Documents;
 - ii. Does not meet the requirements of any applicable statute, rule or regulation, inspection, reference standard, test or approval;
 - iii. Has been damaged prior to the A/E's recommendation of final payment, unless responsibility for the protection thereof has been expressly assumed by CMHA; or
 - iv. That is not free from defects in workmanship, materials or equipment during the period of any warranty or guarantee

23.1.44. Differing Site Condition

- A. Subsurface or latent physical conditions at the site which differ materially from those indicated in this Contract; or
- B. 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 Documents.

23.1.45. Drawings

- A. The drawings enumerated in the schedule of drawings contained in the Specifications and as described in the Contract Documents; and
- B. Graphic portions of the Contract Documents, showing the design, type of construction, location, dimension, and character of the Work to be provided by the Contractor, which generally includes plans, elevations, sections, details, schedules, diagrams, notes, and text.

23.1.46. Electronic File

- A. Information maintained in a computer system or format that is intended to facilitate a Person's use and manipulation of the information including but not limited to Word, Excel, PDF, Primavera, CAD, and BIM files all in their native format.

23.1.47. Enclosure, Permanent

- A. The condition in which the permanent exterior walls and roofs are in place, insulated, weatherproof and weather-tight, and permanent windows and entrances are in place

23.1.48. Enclosure, Temporary

- A. The condition in which the permanent exterior walls and roofs are in place, insulated, weatherproof and weather-tight, and windows and entrances are provided with suitable temporary enclosures

23.1.49. Estimated Construction Cost

- A. The sum of the Estimated Contract Cost amounts published in the Solicitation, as modified by Addenda, for a phase of the Project.

23.1.50. Estimated Contract Cost

- A. The estimated amount for the Contract published in the Solicitation, including the Base Bid estimate and the estimates of selected Alternates, if any, as modified by Addenda.

23.1.51. Extra Materials

- A. Materials required by the Contract Documents that are not incorporated into the Project but are given to CMHA to be used for future maintenance or repairs.

23.1.52. Final Inspection

- A. The final review of the Work of the Contractor by the A/E and CMHA to determine whether issuance of the Certificate of Contract Completion will be issued by CMHA.

23.1.53. Frivolous RFI

- A. RFI's that request information that is evident in the Contract Documents and/or RFI's that do not comply with the definition of an RFI as indicated below.

23.1.54. General Conditions

- A. CMHA's General Conditions currently in effect, which may be modified by the CMHA from time to time.

23.1.55. General Conditions Costs

- A. General Conditions Costs include only the Contractor's costs to provide the general conditions Work including without limitation the costs of all of the following Site related items:
 - i. Scheduling and coordinating the Work;
 - ii. Telephone;
 - iii. Telephone charges;
 - iv. Facsimile;
 - v. Telegrams;
 - vi. Postage
 - vii. Photos
 - viii. Photocopying;
 - ix. Hand tools;
 - x. Simple scaffolds (one level high);
 - xi. Tool breakage;
 - xii. Tool repairs;
 - xiii. Tool replacement;
 - xiv. Tool blades;
 - xv. Tool bits; and
 - xvi. Pre-approved travel, lodging, and parking costs
- B. General Conditions Costs also include:
 - i. Bond premiums; and
 - ii. Premiums for Builder's Risk insurance, if the Contractor is required to purchase a Builder's Risk insurance policy for the Project.

23.1.56. Hazardous Materials

- A. Any material, substance, pollutant, or contaminant that is defined, regulated, referenced, or classified in the Comprehensive Environmental Response, Compensation and Liability Act, Federal Water Pollution Control Act, the Resource Conservation and Recovery Act, Clean Air Act, Hazardous Materials Transportation Uniform Safety Act, Toxic Substances Control Act, or any other Applicable Law relating to any hazardous, toxic, or dangerous waste, substance, or material.
- B. Any substance or material that, after release into the environment or upon exposure, ingestion, inhalation, or assimilation, either directly from the environment or directly by ingestion through food chains, will, or may reasonably be anticipated to, cause death, disease, behavior abnormalities, cancer or genetic abnormalities and specifically includes but is not limited to asbestos, polychlorinated biphenyls ("PCBs"), radioactive materials, including radon and naturally occurring radio nuclides, natural gas, natural gas liquids, liquefied natural gas, synthetic gas, oil, petroleum and petroleum-based derivatives and urea formaldehyde.

23.1.57. HUD

- A. 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.
- B. HUD has agreed, subject to the provisions of an Annual Contributions Contract (ACC), to provide financial assistance to CMHA, which includes assistance in financing the work to be performed under this Contract.
- C. As defined elsewhere in Contract Documents, the determination of HUD may be required to authorize changes in the work or for release of funds to CMHA for payment to the Contractor.
- D. Notwithstanding HUD's role, nothing in this Contract shall be construed to create any contractual relationship between Contractor and HUD.

23.1.58. Indemnified Parties

- A. CMHA, the A/E, other Separate Consultants, and their respective officials, officers, consultants, agents, representatives, and employees, in both individual and official capacities.

23.1.59. Install

- A. Put into use or place in final position, complete and ready for intended service or use.

23.1.60. Liquidated Damages

- A. A sum established in the Contract Documents, pursuant to the statutory delay forfeiture authorized under ORC and federal regulations, to be paid to CMHA due to the Contractor's failure to complete the Work within the Contract Time for achievement of Substantial Completion, or any applicable portion of the Work on or prior to any Milestone date stated on the Contract Documents.

23.1.61. Material Supplier

- A. A Person under a contract with the Contractor to furnish materials or supplies in furtherance of the Work, including all such Persons in any tier.
- B. Material Supplier does not include any Separate Contractor unless expressly assigned in writing to the Contractor by CMHA and accepted by the Contractor.

23.1.62. Milestone

- A. A principal event specified in the Contract relating to an intermediate completion date or time prior to Substantial Completion of all Work.

23.1.63. Modification

- A. A written amendment to the Contract signed by both parties;
- B. A Change Order;
- C. A Change Directive; or
- D. An order for a minor change in the Work.

23.1.64. Notice of Commencement

- A. A notice prepared by CMHA identifying the Project, the Contractors, the Surety for each Contractor, and the name CMHA's representative upon whom a Claim Affidavit may be served.

23.1.65. Notice of Intent to Award

- A. A written notice provided by CMHA to the apparent successful Bidder stating that upon satisfactory compliance with all conditions precedent for execution of a Contract within the time specified CMHA intends to execute a Contract with the Bidder.

23.1.66. Notice to Proceed

- A. A written notice provided by CMHA authorizing the Contractor to proceed with the Work and establishing the date(s) for commencement and completion of the Work.

23.1.67. ORC

- A. The Ohio Revised Code.

23.1.68. Owner

- A. The Cincinnati Metropolitan Housing Authority or its instrumentality or affiliate for whom the Project is being constructed.

23.1.69. Owner's Project Requirements

- A. A written document that details the functional requirements of the Project and the expectations of how it will be used and operated
- B. These include project goals, measureable performance criteria, cost considerations, benchmarks, success criteria, and supporting information.

23.1.70. Partial Occupancy

- A. The condition that occurs when CMHA occupies or uses a portion of the Project prior to Contract Completion, partial occupancy is approved by authorities having jurisdiction, and items of Work cannot be completed until a subsequent date.

23.1.71. Person

- A. An individual, corporation, business trust, estate, partnership, association, or other public or private entity.

23.1.72. Phase

- A. A separation in the Work of the Project by sequence or time intervals, which may include separate contractors for each Phase.

23.1.73. Plan Holder

- A. A prospective Bidder that received a set of Contract Documents prior to the bid opening.

23.1.74. Product Data

- A. Manufacturer's standard illustrations, schedules, diagrams, performance charts, instructions, and brochures that illustrate physical appearance, size, and other characteristics of materials and equipment.

23.1.75. PHA

- A. A Public Housing Authority which at all times shall mean the Cincinnati Metropolitan Housing Authority unless otherwise specified in the Contract Documents.

23.1.76. Project

- A. The entire project, whether construction or rehabilitation, the work for which is provided for in whole or in part under the Contract Documents.

23.1.77. Project Manager

- A. An employee of CMHA assigned to the Project and authorized to perform specific responsibilities.
- B. A Project Manager may also be referred to as a Construction Manager or Construction Contract Administrator.

23.1.78. Project Record Documents

- A. Electronic files and printed documents of all nature prepared by the A/E, which incorporate the information shown on the Contractor's As-Built Documents.
- B. They consist of:
 - i. The "Record Drawings";
 - ii. Certificate of Substantial Completion;
 - iii. Certificate of Contract Completion (as complete);
 - iv. Contractor's Warranty;
 - v. Manufacturers' Warranties, certificate(s) of occupancy, approved shop drawings and other action submittals;
 - vi. Proposal Requests;
 - vii. Requests for Interpretation;
 - viii. Addenda;
 - ix. Change Orders;
 - x. Balancing Reports; and
 - xi. The final version of the approved Construction Progress Schedule

23.1.79. Proposal

- A. The offer of a Contractor to perform the Work set forth in a Proposal Request.

23.1.80. Provide

- A. Furnish and install, complete and ready for intended use.

23.1.81. Punch List

- A. A document listing items of Work requiring correction or completion by the Contractor as a condition precedent to Contract Completion.

23.1.82. Record Drawings

- A. Synonymous to As-Built Drawings; and,

- B. The Drawings, which have been revised by the A/E to show the changes made during the construction process, conformed to represent the Work as executed by the Contractor.

23.1.83. Request for Interpretation/Information (RFI)

- A. A written request to CMHA or the A/E seeking an interpretation or clarification of the Contract Documents.

23.1.84. Samples

- A. Physical examples, color selection items, field samples, and mock-ups furnished by the Contractor to illustrate functional and aesthetic characteristics of products, materials, equipment, or workmanship and establish criteria by which the Work shall be judged.

23.1.85. Schedule of Values

- A. A full, accurate, and detailed statement furnished by the Contractor reflecting a defined breakdown of the Contract Sum.

23.1.86. Separate Consultant

- A. A Person engaged by CMHA to provide Project-related professional services other than the services under this Contract.
- B. The term includes the Separate Consultant's authorized representatives, successors, assigns, and sub-consultants regardless of tier.

23.1.87. Separate Contract

- A. The contract between CMHA and a Separate Consultant or a Separate Contractor.

23.1.88. Separate Contractor

- A. A Person under contract CMHA to provide Project related work other than the Work under this Contract.
- B. The term includes the Separate Contractor's authorized representatives, successors, assigns, and subcontractors regardless of tier.

23.1.89. Shop Drawings

- A. Drawings, diagrams, illustrations, and schedules specifically prepared for the Project provided by the Contractor or a Subcontractor to illustrate some portion of the Work.
- B. Shop Drawings are not Contract Documents.
- C. Shop Drawings on equipment shall include a written statement from the manufacturer of the equipment certifying the equipment is in compliance with the Contract Documents.

23.1.90. Site

- A. The location designated for the Project.

23.1.91. Specifications

- A. The written description of the technical requirements for construction and includes the criteria and tests for determining whether the requirements are met.

23.1.92. Stage

- A. A distinct period in the life cycle of a facility from concept through construction, to use and deconstruction or demolition.
- B. Typical Stages include Program Verification, Schematic Design, Design Development, Construction Documents, Bidding and Award stages; and the Construction, which includes Construction and Closeout activities.

23.1.93. Subcontract

- A. Any contract or agreement between the Contractor and a Subcontractor for performance of a portion of the Work.

23.1.94. Subcontract Form

- A. The Subcontract Form prescribed CMHA and required for use by Contractor when engaging Subcontractors.

23.1.95. Subcontractor

- A. A Person who undertakes to perform any part of the Work on the Project under a contract with a Contractor or with any Person other than the State, including all such Persons in any tier.
- B. The term "Subcontractor" includes Material Suppliers, but does not include any Separate Contractor unless expressly assigned in writing to the Contractor by CMHA and accepted by the Contractor.

23.1.96. Supplementary Conditions

- A. Amendments to the CMHA Construction Contract General Terms and Conditions, issued as a separate document, prescribed by CMHA, which describes conditions of the Contract unique to a particular Project, which may include:
 - i. Provisions regarding the assignment of responsibility for refuse removal;
 - ii. Safety and security precautions and programs;
 - iii. Temporary Project facilities and utilities;
 - iv. Weather and fire protection;
 - v. Scaffolding and equipment;
 - vi. Materials and services to be used commonly by the Contractor and Subcontractors and requiring the Contractor to provide assistance in the utilization of any applicable equipment system;
 - vii. Preparation of operation and maintenance manuals; and
 - viii. Training of CMHA personnel for operation and maintenance of the Project
- B. The CMHA Construction Contract General Terms and Conditions shall not be superseded or amended by Drawings and Specifications, unless so provided in Supplementary Conditions.

23.1.97. Surety

- A. A Person providing a Bid Guaranty or a Bond to a Bidder or a Contractor, as applicable, to indemnify CMHA against all direct and consequential damages suffered by failure of the Bidder to execute the Contract, or of the Contractor to perform the Contract and to pay all lawful claims of Subcontractors, Material Suppliers and laborers, as applicable.

23.1.98. Substantial Completion

- A. The stage in the progress of the Work when the Work (or designated portion of the Work for which CMHA has agreed to take Partial Occupancy) is sufficiently complete in accordance with the Contract that CMHA can utilize the Work for its intended use, as determined by CMHA.
- B. The issuance of a certificate of occupancy or partial certificate of occupancy (if applicable) is a condition precedent to the achievement of Substantial Completion.

23.1.99. Substitution

- A. An article, device, material, equipment, form of construction, or other item, proposed by a prospective Bidder prior to the bid opening and approved by the A/E by Addendum, for incorporation or use in the Work as being functionally and qualitatively equivalent to essential attributes of a Basis of Design or Acceptable Component specified in the proposed Contract Documents.

23.1.100. Unit Price

- A. The cost of providing a unit of Work including labor, materials, services, and associated expenses.

23.1.101. Work

- A. The labor, materials, workmanship, manufacture or fabrication of components, equipment, and services, individually or collectively which are required by the Contract Documents, to be performed, installed, or provided by the Contractor for the Project.
- B. The furnishing of all material, labor, detailing, layout, supplies, plants, tools, scaffolding, transportation, temporary construction, superintendence, demolition, and all other services, facilities and items reasonably necessary for the full and proper performance and completion of the requirements of the Project as set forth in the Contract Documents, and items reasonably inferable therefrom and consistent therewith for the proper execution and completion of the construction and other services required by the Contract Documents, whether provided or to be provided by the Contractor or a Subcontractor, or any other entity for whom the Contractor is responsible, and whether or not performed or located on or off of the Site.

CINCINNATI METROPOLITAN HOUSING AUTHORITY

AND

Contractor

Contract No. 2022-3021

This Contract is made and entered into between the CINCINNATI METROPOLITAN HOUSING AUTHORITY, hereinafter referred to as “Owner” and the below named, hereinafter referred to as “CONTRACTOR.”

Contractor’s name General Contractor

Contractor address General Contractor Address

1. PURPOSE AND BACKGROUND

OWNER is the 17th largest public housing authority in the United States. OWNER’s Asset Management Portfolio of properties are owned and operated by OWNER.

The purpose of this contract is for the Contractor to provide construction services at OWNER’s San Marco property further described in Exhibit A.

2. STATEMENT OF WORK

The Contractor shall furnish the personnel, material, and/or services and otherwise do all things necessary for or incidental to the performance of the work set forth in Exhibit A.

Exhibit B contains the General Terms and Conditions governing work to be performed under this contract, the nature of the working relationship between OWNER and the Contractor, and specific obligations of both parties.

3. APPLICABLE DOCUMENTS

This contract includes all relevant terms in Solicitation 2022-3021 San Marco – Façade Repair, the Contractor’s submitted Proposal and all documents, policies, and documents incorporated by reference. All documents, sections, exhibits, clauses, terms and provisions of this Performance Based Contract shall be read so as to be consistent to all extent practicable. In the event that any document, section, clause, exhibit, term or provision of this Contract conflicts with any provision of any of the above mentioned applicable document, the provision of the instruments listed below shall take precedence in the following order:

- A. Applicable Federal and State of Ohio statutes and regulations
- B. This Instrument (Performance Based Contract)
- C. Solicitation 2022-3021
- D. The Contractor's Proposal
- E. Other Documents incorporated by reference (if applicable)

4. PERIOD OF PERFORMANCE

Subject to other Contract provisions, the period of performance under this Contract is 90 days and shall be from as indicated in the Notice to Proceed, unless sooner terminated or extended as provided herein.

5. COMPENSATION AND PAYMENT

Billing and payment shall be accomplished in accordance with the Contract. OWNER shall pay an amount not to exceed the amounts listed in the Exhibit C, Performance Requirement Summary, for the performance of all things necessary for, or incidental to the performance of work as set forth in Exhibit A, the Statement of Work. Contract Award Amount of \$_____.

Payment shall be contingent upon review and acceptance of the Contractor's Deliverables by OWNER. Compensation for services shall be based on Exhibit C, Performance Requirement Summary.

OWNER will pay Contractor within 30 days of receipt of properly completed invoices or acceptance of deliverable, whichever is later. Invoices shall be submitted to the Construction Manager or designated not more often than monthly. The invoice shall reference Contract No 2022-3021, describe and document to OWNER's satisfaction as description of the deliverable accepted by OWNER and the fixed price cost per deliverable. OWNER may, in its sole discretion, withhold payments claimed by Contractor for services rendered if Contractor fails to satisfactorily comply with any term or condition of this Contract. Invoices shall be sent to 1627 Western Ave., Cincinnati, OH 45214

6. WARRANTIES

Contractor warrants that its services and materials provided will be of good quality and consistent with the professional skill and care ordinarily provided by professionals performing the same or similar service and such services and materials shall be provided in accordance with generally accepted industry standards.

At all times Contractor shall comply with all applicable federal, state and local laws, rules, regulations, ordinances and codes and obtain any licenses or permits required to provide the services under this Contract.

7. UNIFORMS

OWNER shall provide ID Badges for contractors working on OWNER Properties. No employee of the Contractor will be allowed on OWNER properties unless said employee possesses identification that person is an employee/contractor of **General Contractor**.

9. EXECUTIVE REVIEW

This Contract shall be subject to the written approval of OWNER's authorized representative and shall not be binding until so approved.

IN WITNESS WHEREOF, this PROFESSIONAL SERVICES AGREEMENT has been executed by OWNER and _____ to take effect on _____.
Contractor Date

CINCINNATI METROPOLITAN
HOUSING AUTHORITY

General Contractor

By: _____

By: _____

DATE

DATE

CONTRACT BOND

(O.R.C. § 153.57)

KNOW ALL PERSONS BY THESE PRESENTS, that we, the undersigned ("Contractor"), as principal, and _____, as surety, are hereby held and firmly bound unto Cincinnati Metropolitan Housing Authority ("Owner") as obligee, in the penal sum of _____ Dollars (\$ _____), for the payment of which well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors, and assigns.

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH that whereas, the above-named principal did on the _____ day of _____, 20____, enter into a contract with the Owner for _____ related to San Marco – Façade Repair ("Project"), which said contract is made a part of this bond the same as though set forth herein:

Now, if the said Contractor shall well and faithfully do and perform the things agreed by the Contractor to be done and performed according to the terms of said contract; and shall pay all lawful claims of subcontractors, materialmen, and laborers, for labor performed and materials furnished in the carrying forward, performing, or completing of said contract; we agreeing and assenting that this undertaking shall be for the benefit of any materialman or laborer having a just claim, as well as for the obligee herein; then this obligation shall be void; otherwise the same shall remain in full force and effect; it being expressly understood and agreed that the liability of the surety for any and all claims hereunder shall in no event exceed the penal amount of this obligation as herein stated.

The said surety hereby stipulates and agrees that no modifications, omissions, or additions in or to the terms of the said contract or in or to the plans or specifications therefore shall in any wise affect the obligations of said surety on its bond, and does hereby waive notice of any such modifications, omissions or additions to the terms of the contract or to the work or to the specifications.

Signed and sealed this _____ day of _____, 20____.

(PRINCIPAL)

(SURETY)

By: _____

By: _____

Printed Name & Title: _____

Printed Name & Title: _____

Surety's Address: _____

Surety's Telephone Number: _____

Surety's Fax Number: _____

NAME OF SURETY'S AGENT

Surety's Agent's Address: _____

Surety's Agent's Telephone Number: _____

Surety's Agent's Fax Number: _____

SOLICITATION NO. 2022-3021
EXHIBIT A
STATEMENT OF WORK

Contractor is to provide construction services as outlined in Solicitation 2022-3021:

1. Tuckpointing and other exterior repairs.

Exhibit E

CONTRACTOR ACKNOWLEDGEMENT

I acknowledge receipt of the Contract No. 2022-3021 and the following exhibits:

EXHIBIT	INITIAL
Exhibit A: Statement of Work	
Exhibit B: General Conditions for Construction Contracts	
Exhibit C: Performance Requirement Summary	
Exhibit D: Davis Bacon Wage Determination	

Contractor accepts the terms and conditions of the Contract and attached Exhibits A-D.

Signature

Date

WAGE DETERMINATION

- A. The Prevailing Wages shall be paid for a legal day's work to laborers, workmen or mechanics engaged in work under this Contract, at the site of the Project, in the trade or occupation listed.
- B. The Project falls under the residential construction type.
- C. The Wage Determinations provided shall be closely monitored by the contractor/bidder/quoter for any modifications until the actual construction work begins locking in the wage determination for the duration of the contract. Wage determinations and modifications can be monitored and obtained at www.wdol.gov. Failure to include the current wage determination will not relieve the contractors of potential wage liabilities.
- D. It shall be the Prime Contractor's responsibility to verify the accuracy of the reported wages, including his subcontractors.
- E. It shall be the Prime Contractor's responsibility to include the applicable Prevailing Wages and the Fair Labor Standards Provision in all contracts with Sub-Contractors on the project.
- F. It shall be the Contractors responsibility to be certain that all the classifications needed to accomplish the contract fall underneath one of the classifications listed on the Wage Determination provided in the scope of work.
- G. In the event that a required classification is not listed, a contractor may submit a request for an additional classification. Remember the request is not valid unless the Department of Labor approves it. There will be no justification for an adjustment to a contract price due to an increased wage rate. The contractor should have been aware of any particular skilled trades that were not included in the original wage determination and thus accepted any risk that DOL would "conform" a pay rate higher than what they estimated when they priced their proposal. The contractor is responsible to propose wage/benefit rates that "bear a reasonable relationship" to the other classifications and rates listed on the wage determination.
- H. The following pages are the Prevailing Rates of Wages as ascertained by the State or other Agency for this Project.
- I. Listed below is a checklist of items required for Wage and Hour Compliance.
- J. Remember, prompt correction of deficiencies is essential. Failure to correct in a timely manner will be the withholding of payments on your contract until the deficiencies are corrected. For your convenience listed below is a checklist of items required:

- | | |
|--|---|
| <input type="checkbox"/> Appointment of Paymaster | |
| <input type="checkbox"/> Equal Employment Opportunity Affirmative Action Policy Statement (<i>EEOAAPS</i>) | |
| <input type="checkbox"/> Equal Employment Opportunity Compliance Certificate (<i>EEOCC</i>) | |
| <input type="checkbox"/> Letter of Understanding | |
| <input type="checkbox"/> Weekly certified payrolls that include: | |
| <input type="checkbox"/> Contractor's Name | <input type="checkbox"/> Calendar Days |
| <input type="checkbox"/> Contractor's Address | <input type="checkbox"/> Hours Worked |
| <input type="checkbox"/> Payroll # | <input type="checkbox"/> Total Hours |
| <input type="checkbox"/> Week Ending Date | <input type="checkbox"/> Rate of Pay |
| <input type="checkbox"/> Project and Location | <input type="checkbox"/> Gross Amount Earned |
| <input type="checkbox"/> Contract or Purchase Order No. | <input type="checkbox"/> Taxes or Write 1099 across columns if employee files his own taxes |
| <input type="checkbox"/> Name of Employee | <input type="checkbox"/> Statement of Compliance (<i>back page of the payroll sheet</i>) |
| <input type="checkbox"/> Social Security Number/Address of Employee | <input type="checkbox"/> One of the boxes checked indicating if fringes benefits are paid in cash or approved program |
| <input type="checkbox"/> No. of Exemptions | <input type="checkbox"/> Contractor's Signature certifying payroll |
| <input type="checkbox"/> Work Classification | |
| | |
| <input type="checkbox"/> General and Subcontractors form (<i>if applicable</i>) | |
| <input type="checkbox"/> Employment Utilization Report (<i>upon completion</i>) | |
| <input type="checkbox"/> Section 3 Form (<i>if applicable</i>) | |

Signature _____

Date _____

Note: Bids may not be accepted if this form is not acknowledged and signed.

DOCUMENT 00 31 43 - PERMIT APPLICATION

1.1 PERMIT APPLICATION INFORMATION

- A. This Document with its referenced attachments is part of the Procurement and Contracting Requirements for Project. They provide Owner's information for Bidders' convenience and are intended to supplement rather than serve in lieu of the Bidders' own investigations. This Document and its attachments are not part of the Contract Documents.
- B. Permit Application: The building permit for Project has been applied for by Architect. The winning bidder will need to pick up the permit from City of Cincinnati Building Department and pay the remaining fee. The remaining fee from the City of Cincinnati Building Department amount will be disclosed when Permit is issued. All permits will be provided to winning bidder upon signing of contracts.

END OF DOCUMENT 00 31 43

SECTION 01 10 00 - SUMMARY

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Project information.
2. Work covered by Contract Documents.
3. Phased construction.
4. Access to site.
5. Coordination with occupants.
6. Work restrictions.
7. Specification and drawing conventions.
8. Miscellaneous provisions.

B. Related Requirements:

1. Section 015000 "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.

1.2 PROJECT INFORMATION

A. Project Identification: San Marco building

1. Project Location: 1601 Madison Road, Cincinnati, Ohio.

B. Owner: Cincinnati Metropolitan Housing Authority, 1627 Western Ave., Cincinnati, Ohio 45214.

1. Owner's Representative: Michael Koch, Michael.koch@cintimha.com.

C. Architect: Hub+Weber Architects, PLC., 200 West Pike Street, Covington, KY 41011.

D. Architect's Consultants: The Architect has retained the following design professionals who have prepared designated portions of the Contract Documents.

1. Structural Engineer: GOP Limited, 431 Ohio Pike, Suite 100N, Cincinnati, OH 45255.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

A. The Work of Project is defined by the Contract Documents and consists of the following:

1. Existing Exterior Façade: All sides of the building façade are to be repaired per the Façade Investigation Report prepared by GOP Limited, dated January 13, 2022. The work consists of masonry repair of brick, stone, and masonry joints throughout.

B. Type of Contract.

1. Project will be constructed under a single prime contract.

1.4 CONSTRUCTION

- A. The Work shall be conducted in one complete phase per CMHA's schedule.
- B. Before commencing Work, submit an updated copy of Contractors construction schedule showing the sequence, commencement, and completion dates.

1.5 ACCESS TO SITE

- A. General: Contractor shall have full use of Project Exterior site for construction operations during construction period. Contractor's use of Project site is limited only by Owner's right to perform work or to retain other contractors on portions of Project.
- B. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period. Repair damage caused by construction operations.

1.6 COORDINATION WITH OCCUPANTS

- A. Occupancy of the Building shall not be affected by the Areas of Construction, as the Project only requires access to the exterior façade of the building.
 - 1. In case the work requires access to the building due to unforeseen conditions, Contractor is to immediately notify Owner, and schedule access to the interior spaces. The work for unforeseen conditions shall be done in a timely manner so the disruption to any Occupants is minimal.

1.7 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.
 - 1. Comply with obtaining permits and limitations on use of public streets and with other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Limit work in the existing building to normal business working hours to be approved by the owner, Monday through Friday, unless otherwise indicated.
 - 1. Weekend/Holiday House: Work may not take place on weekends and holidays listed in the *General Terms and Conditions* of these documents.
 - 2. Obtain Owner's written approval in advance regarding requested work hours that may vary from the approved normal business working hours.
- C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
 - 1. Notify Architect not less than two days in advance of proposed utility interruptions.
 - 2. Obtain Architect's written permission before proceeding with utility interruptions.
- D. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to Owner occupancy with Owner.

1. Notify Architect not less than two days in advance of proposed disruptive operations.
 2. Obtain Architect's written permission before proceeding with disruptive operations.
- E. Controlled Substances: Use of tobacco products and other controlled substances on Project site is not permitted.
- F. No Weapons or Firearms, concealed or otherwise, are permitted on the site.

1.8 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
 2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.
- C. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:
1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
 2. Abbreviations: Materials and products are identified by abbreviations published as part of the U.S. National CAD Standard.
 3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.

1.9 ACCESSIBILITY REQUIREMENTS

- A. Accessibility requirements are not applicable due to the work consisting of façade repair only. During performance of the work, at least one of the Accessible entrances shall remain in service. Note that all accessibility requirements, including the Uniform Federal Accessibility Standards (UFAS) must be met absolutely.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 10 00

SECTION 01 26 00 - CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

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

1.2 MINOR CHANGES IN THE WORK

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

1.3 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Work Change Proposal Requests issued by Architect are not instructions either to stop work in progress or to execute the proposed change.
 - 2. Within time specified in Proposal Request] or 20 days, when not otherwise specified, after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include costs of labor and supervision directly attributable to the change.
 - d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - e. Quotation Form: Use CSI Form 13.6D, "Proposal Worksheet Summary," and Form 13.6C, "Proposal Worksheet Detail."
- B. Contractor-Initiated Work Change Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Architect.
 - 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
 - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.

3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
4. Include costs of labor and supervision directly attributable to the change.
5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
6. Comply with requirements in Section 012500 "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.
7. Work Change Proposal Request Form: Use CSI Form 13.6A, "Change Order Request (Proposal)," with attachments CSI Form 13.6D.

1.4 ADMINISTRATIVE CHANGE ORDERS

- A. Allowance Adjustment: See Section 012100 "Allowances" for administrative procedures for preparation of Change Order Proposal for adjusting the Contract Sum to reflect actual costs of allowances.
- B. Unit-Price Adjustment: See Section 012200 "Unit Prices" for administrative procedures for preparation of Change Order Proposal for adjusting the Contract Sum to reflect measured scope of unit-price work.
- C. Extensions of Contract Time:
 1. If the basis exists for an extension of time beyond the set milestone dates outlined in the contract, and extension of time on the basis of weather delays may be granted only for the number of Weather Delay Days in excess of the number of days listed as the Standard Baseline for that month.
- D. Standard Baseline for Average Climatic Range
 1. The Owner has reviewed weather data available from the National Oceanic and Atmospheric Administration and determined a Standard Baseline of average climatic range for the State of Ohio.
 2. Standard Baseline shall be regarded as the normal and anticipatable number of calendar days for each month during which construction activity shall be expected to be prevented and suspended by cause of adverse weather. Any adverse weather, as outlined below that is above the baseline can be requested as a weather day.
 3. Standard Baseline:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
12	11	8	7	7	6	7	5	4	5	6	11

- E. Adverse Weather and Weather Delay Days
 1. Adverse Weather is defined as the occurrence of one of more of the following conditions which prevents exterior construction activity of access to the site within twenty-four (24) hours:
 - a. Precipitation (rain, snow, or ice) in excess of one-tenth (0.10") liquid measure.
 - b. Temperatures which do not rise above 32 degrees F. before 10: a.m.
 - c. Temperatures which do not rise above that specified for the day's construction activity by 10 a.m., if any is specified.
 - d. Sustained wind in excess of twenty-five (25) m.p.h.
 - e. Standing snow in excess of one inch (1.00").
- F. Weather Day Allowance

1. Weather days will be discussed at each progress meeting. The contractor, at this time, will be required to ask for credit for any weather days that meet the above-mentioned criteria. If weather days are not requested at the progress meetings, they will be forfeited at that time. Weather days will not be awarded at the end of the project once a progress meeting has taken place.

1.5 CHANGE ORDER PROCEDURES

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

1.6 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: Architect may issue a Construction Change Directive on AIA Document G714. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 26 00

SECTION 01 31 00 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. Coordination drawings.
 - 2. Requests for Information (RFIs).
 - 3. Project meetings.
- B. Related Requirements:
 - 1. Section 017300 "Execution" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.

1.2 DEFINITIONS

- A. RFI: Request For Information from Owner, Architect, or Contractor seeking information required by or clarifications of the Contract Documents.

1.3 INFORMATIONAL SUBMITTALS

- A. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Use CSI Form 1.5A. Include the following information in tabular form:
 - 1. Name, address, and telephone number of entity performing subcontract or supplying products.
 - 2. Number and title of related Specification Section(s) covered by subcontract.
 - 3. Drawing number and detail references, as appropriate, covered by subcontract.

1.4 GENERAL COORDINATION PROCEDURES

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections, that depend on each other for proper installation, connection, and operation.
 - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.

- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
 - 1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 - 1. Preparation of Contractor's construction schedule.
 - 2. Preparation of the schedule of values.
 - 3. Installation and removal of temporary facilities and controls.
 - 4. Delivery and processing of submittals.
 - 5. Progress meetings.
 - 6. Preinstallation conferences.
 - 7. Project closeout activities.
 - 8. Startup and adjustment of systems.

1.5 COORDINATION DRAWINGS

- A. Coordination Drawings, General: Prepare coordination drawings according to requirements in individual Sections, where installation is not completely shown on Shop Drawings, where limited space availability necessitates coordination, or if coordination is required to facilitate integration of products and materials fabricated or installed by more than one entity.
 - 1. Content: Project-specific information, drawn accurately to a scale large enough to indicate and resolve conflicts. Do not base coordination drawings on standard printed data. Include the following information, as applicable:
 - a. Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
- B. Coordination Drawing Organization: Organize coordination drawings as follows:
 - 1. Structural Penetrations: Indicate penetrations and openings required for all disciplines.
 - 2. Embedded Items: Indicate sizes and locations of embedded items for metal fabrications, sleeves, anchor bolts, bearing plates, angles, and similar items.
 - 3. Review: Architect will review coordination drawings to confirm that the Work is being coordinated, but not for the details of the coordination, which are Contractor's responsibility.

1.6 REQUESTS FOR INFORMATION (RFIs)

- A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.
 - 1. Architect will return RFIs submitted to Architect by other entities controlled by Contractor with no response.
 - 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.

- B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:
1. Project name.
 2. Project number.
 3. Date.
 4. Name of Contractor.
 5. Name of Architect.
 6. RFI number, numbered sequentially.
 7. RFI subject.
 8. Specification Section number and title and related paragraphs, as appropriate.
 9. Drawing number and detail references, as appropriate.
 10. Field dimensions and conditions, as appropriate.
 11. Contractor's suggested resolution. If Contractor's solution(s) impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
 12. Contractor's signature.
 13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
- C. RFI Forms: AIA Document G716.
- D. Architect's Action: Architect will review each RFI, determine action required, and respond. Allow **seven** working days for Architect's response for each RFI. RFIs received by Architect after 1:00 p.m. will be considered as received the following working day.
1. The following RFIs will be returned without action:
 - a. Requests for approval of submittals.
 - b. Requests for approval of substitutions.
 - c. Requests for coordination information already indicated in the Contract Documents.
 - d. Requests for adjustments in the Contract Time or the Contract Sum.
 - e. Requests for interpretation of Architect's actions on submittals.
 - f. Incomplete RFIs or inaccurately prepared RFIs.
 2. Architect's action may include a request for additional information, in which case Architect's time for response will date from time of receipt of additional information.
 3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Section 012600 "Contract Modification Procedures."
 - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within 10 days of receipt of the RFI response.
- E. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly Use CSI Log Form 13.2B site. Include the following:
1. Project name.
 2. Name and address of Contractor.
 3. Name and address of Architect.
 4. RFI number including RFIs that were dropped and not submitted.
 5. RFI description.

6. Date the RFI was submitted.
 7. Date Architect' response was received.
- F. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within seven days if Contractor disagrees with response.
1. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
 2. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.

1.7 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site unless otherwise indicated.
1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.
 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
 3. Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner, and Architect, within three days of the meeting.
- B. Preconstruction Conference: Architect will schedule and conduct a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than **15** days after execution of the Agreement.
1. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 2. Agenda: Discuss items of significance that could affect progress, including the following:
 - a. Schedule of Values.
 - b. Tentative construction schedule.
 - c. Phasing.
 - d. Insurance,
 - e. Critical work sequencing and long-lead items.
 - f. Designation of key personnel and their duties.
 - g. Procedures for processing field decisions and Change Orders.
 - h. Procedures for RFIs.
 - i. Procedures for testing and inspecting.
 - j. Procedures for processing Applications for Payment.
 - k. Distribution of the Contract Documents.
 - l. Submittal procedures.
 - m. Preparation of record documents.
 - n. Use of the premises.
 - o. Work restrictions.
 - p. Working hours.
 - q. Owner's occupancy requirements.
 - r. Responsibility for temporary facilities and controls.

- s. Procedures for moisture and mold control.
 - t. Procedures for disruptions and shutdowns.
 - u. Construction waste management and recycling.
 - v. Parking availability.
 - w. Office, work, and storage areas.
 - x. Equipment deliveries and priorities.
 - y. First aid.
 - z. Security.
 - aa. Progress cleaning.
3. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.

C. Progress Meetings: Conduct progress meetings at monthly intervals.

- 1. Attendees: In addition to representatives of Owner, and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
- 2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 - 1) Review schedule for next period.
 - b. Review present and future needs of each entity present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Status of submittals.
 - 4) Deliveries.
 - 5) Off-site fabrication.
 - 6) Access.
 - 7) Site utilization.
 - 8) Temporary facilities and controls.
 - 9) Progress cleaning.
 - 10) Quality and work standards.
 - 11) Status of correction of deficient items.
 - 12) Field observations.
 - 13) Status of RFIs.
 - 14) Status of proposal requests.
 - 15) Pending changes.
 - 16) Status of Change Orders.
 - 17) Pending claims and disputes.
 - 18) Documentation of information for payment requests.

3. Minutes: Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.
 - a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 31 00

SECTION 01 32 00 - CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
 - 1. Contractor's construction schedule.
 - 2. Construction schedule updating reports.
 - 3. Daily construction reports.
 - 4. Site condition reports.

1.2 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.
 - 1. Critical Activity: An activity on the critical path that must start and finish on the planned early start and finish times.
 - 2. Predecessor Activity: An activity that precedes another activity in the network.
 - 3. Successor Activity: An activity that follows another activity in the network.
- B. CPM: Critical path method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of Project.
- C. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- D. Float: The measure of leeway in starting and completing an activity.
 - 1. Float time is not for the exclusive use or benefit of either Owner or Contractor, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date.

1.3 INFORMATIONAL SUBMITTALS

- A. Format for Submittals: Submit required submittals in the following format:
 - 1. Working electronic copy of schedule file, where indicated.
 - 2. PDF electronic file.
- B. Startup Network Diagram: Of size required to display entire network for entire construction period. Show logic ties for activities.
- C. Contractor's Construction Schedule: Initial schedule, of size required to display entire schedule for entire construction period.

1. Submit a working electronic copy of schedule, using software indicated, and labeled to comply with requirements for submittals. Include type of schedule (initial or updated) and date on label.
- D. CPM Reports: Concurrent with CPM schedule, submit each of the following reports. Format for each activity in reports shall contain activity number, activity description, original duration, remaining duration, early start date, early finish date, late start date, late finish date, and total float in calendar days.
 1. Activity Report: List of all activities sorted by activity number and then early start date, or actual start date if known.
 2. Logic Report: List of preceding and succeeding activities for all activities, sorted in ascending order by activity number and then early start date, or actual start date if known.
 3. Total Float Report: List of all activities sorted in ascending order of total float.
 4. Earnings Report: Compilation of Contractor's total earnings from the Notice to Proceed until most recent Application for Payment.
- E. Construction Schedule Updating Reports: Submit with Applications for Payment.
- F. Daily Construction Reports: Submit every two-weeks intervals.
- G. Site Condition Reports: Submit at time of discovery of differing conditions.
- H. Special Reports: Submit at time of unusual event.

1.4 COORDINATION

- A. Coordinate Contractor's construction schedule with the schedule of values, list of subcontracts, submittal schedule, progress reports, payment requests, and other required schedules and reports.
 1. Secure time commitments for performing critical elements of the Work from entities involved.
 2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

PART 2 - PRODUCTS

2.1 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

- A. Time Frame: Extend schedule from date established for the Notice to Proceed to date of final completion.
 1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- B. Activities: Treat each façade or separate area as a separate numbered activity for each main element of the Work. Comply with the following:
 1. Activity Duration: Define activities so no activity is longer than 20 days, unless specifically allowed by Architect.

2. Procurement Activities: Include procurement process activities for the following long lead items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
 3. Submittal Review Time: Include review and resubmittal times indicated in Section 013300 "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's construction schedule with submittal schedule.
 4. Startup and Testing Time: Include no fewer than 15 days for startup and testing.
 5. Substantial Completion: Indicate completion in advance of date established for Substantial Completion and allow time for Architect's administrative procedures necessary for certification of Substantial Completion.
 6. Punch List and Final Completion: Include not more than 30 days for completion of punch list items and final completion.
- C. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule and show how the sequence of the Work is affected.
1. Phasing: Arrange list of activities on schedule by phase.
 2. Work by Owner: Include a separate activity for each portion of the Work performed by Owner.
 3. Work Restrictions: Show the effect of the following items on the schedule:
 - a. Coordination with existing construction.
 - b. Limitations of continued occupancies.
 - c. Uninterruptible services.
 - d. Partial occupancy before Substantial Completion.
 - e. Use of premises restrictions.
 - f. Provisions for future construction.
 - g. Seasonal variations.
 - h. Environmental control.
 4. Work Stages: Indicate important stages of construction for each major portion of the Work.
- D. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and final completion.
- E. Upcoming Work Summary: Prepare summary report indicating activities scheduled to occur or commence prior to submittal of next schedule update. Summarize the following issues:
1. Unresolved issues.
 2. Unanswered Requests for Information.
 3. Rejected or unreturned submittals.
 4. Notations on returned submittals.
 5. Pending modifications affecting the Work and Contract Time.
- F. Recovery Schedule: When periodic update indicates the Work is 14 or more calendar days behind the current approved schedule, submit a separate recovery schedule indicating means by which Contractor intends to regain compliance with the schedule.
- G. Computer Scheduling Software: Prepare schedules using current version of a program that has been developed specifically to manage construction schedules.

2.2 CONTRACTOR'S CONSTRUCTION SCHEDULE (GANTT CHART)

- A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal, Gantt-chart-type, Contractor's construction schedule within 30 days of date established for Notice to Proceed.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.
 - 1. For construction activities that require three months or longer to complete, indicate an estimated completion percentage in 10 percent increments within time bar.

2.3 REPORTS

- A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:
 - 1. List of subcontractors at Project site.
 - 2. List of separate contractors at Project site.
 - 3. Approximate count of personnel at Project site.
 - 4. Equipment at Project site.
 - 5. Material deliveries.
 - 6. High and low temperatures and general weather conditions, including presence of rain or snow.
 - 7. Accidents.
 - 8. Meetings and significant decisions.
 - 9. Unusual events.
 - 10. Stoppages, delays, shortages, and losses.
 - 11. Meter readings and similar recordings.
 - 12. Emergency procedures.
 - 13. Orders and requests of authorities having jurisdiction.
 - 14. Change Orders received and implemented.
 - 15. **Construction** Change Directives received and implemented.
 - 16. Services connected and disconnected.
 - 17. Partial completions.
 - 18. Substantial Completions authorized.
- B. Site Condition Reports: Immediately on discovery of a difference between site conditions and the Contract Documents, prepare and submit a detailed report. Submit with a Request for Information. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

PART 3 - EXECUTION

3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.
 - 1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.

2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
 3. As the Work progresses, indicate final completion percentage for each activity.
- B. Distribution: Distribute copies of approved schedule to Architect, Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
1. Post copies in Project meeting rooms and temporary field offices.
 2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

END OF SECTION 01 32 00

SECTION 01 33 00 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.

1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Architect's responsive action.
- B. Informational Submittals: Written and graphic information and physical samples that do not require Architect's responsive action. Submittals may be rejected for not complying with requirements.

1.3 ACTION SUBMITTALS

- A. Submittal Schedule: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect and additional time for handling and reviewing submittals required by those corrections.

1.4 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

- A. Architect's Digital Data Files: Electronic copies of digital data files of the Contract Drawings will be provided by Architect for Contractor's use in preparing submittals.
 - 1. Architect will furnish Contractor one set of digital data drawing files of the Contract Drawings for use in preparing Shop Drawings and Project record drawings.
 - a. Architect makes no representations as to the accuracy or completeness of digital data drawing files as they relate to the Contract Drawings.
 - b. Contractor shall execute a data licensing agreement acceptable to the Owner and Architect.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.

- a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
 2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
 3. Resubmittal Review: Allow 15 days for review of each resubmittal.
- D. Electronic Submittals: Identify and incorporate information in each electronic submittal file as follows:
1. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
 2. Name file with submittal number or other unique identifier, including revision identifier.
 - a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., LNHS-061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., LNHS-061000.01.A).
 3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Architect.
 4. Transmittal Form for Electronic Submittals: Use electronic form acceptable to Owner, containing the following information:
 - a. Project name.
 - b. Date.
 - c. Name and address of Architect.
 - d. Name of Construction Manager.
 - e. Name of Contractor.
 - f. Name of firm or entity that prepared submittal.
 - g. Names of subcontractor, manufacturer, and supplier.
 - h. Category and type of submittal.
 - i. Submittal purpose and description.
 - j. Specification Section number and title.
 - k. Specification paragraph number or drawing designation and generic name for each of multiple items.
 - l. Drawing number and detail references, as appropriate.
 - m. Location(s) where product is to be installed, as appropriate.
 - n. Related physical samples submitted directly.
 - o. Indication of full or partial submittal.
 - p. Transmittal number; numbered consecutively.
 - q. Submittal and transmittal distribution record.
 - r. Other necessary identification.
 - s. Remarks.
 5. Metadata: Include the following information as keywords in the electronic submittal file metadata:

- a. Project name.
 - b. Number and title of appropriate Specification Section.
 - c. Manufacturer name.
 - d. Product name.
- E. Options: Identify options requiring selection by Architect.
- F. Deviations: Identify deviations from the Contract Documents on submittals.
- G. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
 - 1. Note date and content of previous submittal.
 - 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
 - 3. **Only one resubmittal per shop drawing package will be permitted. Time for review of additional resubmittals will be charged to the Contractor at the Architect's normal hourly billing rates.**
- H. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- I. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Architect's action stamp.

PART 2 - PRODUCTS

2.1 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements:
 - 1. Submit electronic submittals via email as PDF electronic files.
 - a. Architect will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.
 - 2. Action Submittals: Submit the number of opaque reproductions which the Contractor requires, plus two copies which will be retained by the Architect.
 - 3. Informational Submittals: Submit two paper copies of each submittal unless otherwise indicated. Architect will not return copies.
 - 4. Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
 - a. Provide a digital signature with digital certificate on electronically submitted certificates and certifications where indicated.
 - b. Provide a notarized statement on original paper copy certificates and certifications where indicated.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.

1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.
 2. Mark each copy of each submittal to show which products and options are applicable.
 3. Include the following information, as applicable:
 - a. Manufacturer's catalog cuts.
 - b. Manufacturer's product specifications.
 - c. Standard color charts.
 - d. Statement of compliance with specified referenced standards.
 - e. Testing by recognized testing agency.
 - f. Application of testing agency labels and seals.
 - g. Notation of coordination requirements.
 - h. Availability and delivery time information.
 4. Submit Product Data before or concurrent with Samples.
 5. Submit Product Data in the following format:
 - a. PDF electronic file.
 - b. The number of copies of product data which the Contractor requires, plus two copies which will be retained by Architect.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Identification of products.
 - b. Schedules.
 - c. Compliance with specified standards.
 - d. Notation of coordination requirements.
 - e. Notation of dimensions established by field measurement.
 - f. Relationship and attachment to adjoining construction clearly indicated.
 - g. Seal and signature of professional engineer if specified.
 2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches (215 by 280 mm), but no larger than 30 by 42 inches (750 by 1067 mm.)
 3. Submit Shop Drawings in the following format:
 - a. PDF electronic file.
 - b. The number of opaque reproductions which the Contractor requires, plus two copies which will be retained by the Architect.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
 2. Identification: Attach label on unexposed side of Samples that includes the following:
 - a. Generic description of Sample.
 - b. Product name and name of manufacturer.
 - c. Sample source.

- d. Number and title of applicable Specification Section.
- 3. For projects where electronic submittals are required, provide corresponding electronic submittal of Sample transmittal, digital image file illustrating Sample characteristics, and identification information for record.
- 4. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
 - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
 - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
- 5. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
 - a. Number of Samples: Submit one full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return submittal with options selected.
- 6. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
 - a. Number of Samples: Submit two sets of Samples. Architect will retain one. Sample sets: remainder will be returned. Mark up and retain one returned Sample set as a project record sample.
 - 1) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.
- E. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
 - 1. Submit product schedule in the following format:
 - a. PDF electronic file.
 - b. Three paper copies of product schedule or list unless otherwise indicated. Architect will return two copies.
- F. Coordination Drawings Submittals: Comply with requirements specified in Section 013100 "Project Management and Coordination."
- G. Contractor's Construction Schedule: Comply with requirements specified in Section 013200 "Construction Progress Documentation."

- H. Application for Payment and Schedule of Values: Comply with requirements specified in *"Payments"* under *"General Terms and Conditions"*.
- I. Test and Inspection Reports and Schedule of Tests and Inspections Submittals: Comply with requirements specified in Section 014000 "Quality Requirements."
- J. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Section 017700 "Closeout Procedures."
- K. Maintenance Data: Comply with requirements specified in Section 017823 "Maintenance Data."
- L. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.
- M. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on AWS forms. Include names of firms and personnel certified.
- N. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- O. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- P. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- Q. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- R. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- S. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- T. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project.
- U. Schedule of Tests and Inspections: Comply with requirements specified in Section 014000 "Quality Requirements."
- V. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
- W. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed

before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.

- X. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
- Y. Design Data: Prepare and submit written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

2.2 DELEGATED-DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
 - 1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect.
- B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally signed PDF electronic file and three paper copies of certificate, signed, and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
 - 1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
- B. Project Closeout and Maintenance Material Submittals: See requirements in Section 017700 "Closeout Procedures."
- C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ARCHITECT'S ACTION

- A. General: Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action.

- B. Action Submittals: Architect will review each submittal, make marks to indicate corrections or revisions required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action, as follows:
 - 1. No Exceptions Noted.
 - 2. Exceptions Noted.
 - 3. Revise and Resubmit.
 - 4. Rejected.
- C. Informational Submittals: Architect will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.
- D. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.
- E. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

END OF SECTION 01 33 00

SECTION 01 35 16 - ALTERATION PROJECT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes special procedures for alteration work.

1.2 DEFINITIONS

- A. Alteration Work: This term includes repair, and maintenance work performed within existing façades or on existing surfaces as part of the Project.
- B. Consolidate: To strengthen loose or deteriorated materials in place.
- C. Design Reference Sample: A sample that represents the Architect's prebid selection of work to be matched; it may be existing work or work specially produced for the Project.
- D. Dismantle: To remove by disassembling or detaching an item from a surface, using gentle methods and equipment to prevent damage to the item and surfaces; disposing of items unless indicated to be salvaged or reinstalled.
- E. Match: To blend with adjacent construction and manifest no apparent difference in material type, species, cut, form, detail, color, grain, texture, or finish; as approved by Architect.
- F. Refinish: To remove existing finishes to base material and apply new finish to match original, or as otherwise indicated.
- G. Repair: To correct damage and defects, retaining existing materials, features, and finishes. This includes patching, piecing-in, splicing, consolidating, or otherwise reinforcing or upgrading materials.
- H. Replace: To remove, duplicate, and reinstall entire item with new material. The original item is the pattern for creating duplicates unless otherwise indicated.
- I. Replicate: To reproduce in exact detail, materials, and finish unless otherwise indicated.
- J. Reproduce: To fabricate a new item, accurate in detail to the original, and from either the same or a similar material as the original, unless otherwise indicated.
- K. Retain: To keep existing items that are not to be removed or dismantled.
- L. Strip: To remove existing finish down to base material unless otherwise indicated.

1.3 PROJECT MEETINGS FOR ALTERATION WORK

- A. Preliminary Conference for Alteration Work: Before starting alteration work, conduct conference at Project site.

1. Attendees: In addition to representatives of Owner, Architect, Contractor testing service representative, and chemical-cleaner manufacturer(s) shall be represented at the meeting.
 2. Agenda: Discuss items of significance that could affect progress of alteration work, including review of the following:
 - a. Fire-prevention plan.
 - b. Governing regulations.
 - c. Areas where existing construction is to remain and the required protection.
 - d. Hauling routes.
 - e. Sequence of alteration work operations.
 - f. Storage, protection, and accounting for salvaged and specially fabricated items.
 - g. Existing conditions, staging, and structural loading limitations of areas where materials are stored.
 3. Reporting: Record results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from conference.
- B. Coordination Meetings: Conduct coordination meetings specifically for alteration work at intervals of every two-weeks. Coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and preinstallation conferences.
1. Agenda: Review and correct or approve minutes of previous coordination meeting. Review other items of significance that could affect progress of alteration work. Include topics for discussion as appropriate to status of Project.
 2. Reporting: Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

1.4 MATERIALS OWNERSHIP

- A. Historic items, relics, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, antiques, and other items of interest or value to Owner that may be encountered or uncovered during the Work, regardless of whether they were previously documented, remain Owner's property.

1.5 INFORMATIONAL SUBMITTALS

- A. Alteration Work Program: Submit 30 days before work begins.
- B. Fire-Prevention Plan: Submit 30 days before work begins.

1.6 QUALITY ASSURANCE

- A. Title X Requirement: Each firm conducting activities that disturb painted surfaces shall be a "Lead-Safe Certified Firm" according to 40 CFR 745, Subpart E, and use only workers that are trained in lead-safe work practices.
- B. Alteration Work Program: Prepare a written plan for alteration work for whole Project, including each phase or process and protection of surrounding materials during operations. Show compliance with indicated methods and procedures specified in this and other Sections. Coordinate this whole-Project alteration work program with specific requirements of programs required in other alteration work Sections.

1. Dust and Noise Control: Include locations of proposed temporary dust- and noise-control partitions and means of egress from occupied areas coordinated with continuing on-site operations and other known work in progress.
 2. Debris Hauling: Include plans clearly marked to show debris hauling routes, turning radii, and locations and details of temporary protective barriers.
- C. Fire-Prevention Plan: Prepare a written plan for preventing fires during the Work, including placement of fire extinguishers, fire blankets, rag buckets, and other fire-control devices during each phase or process. Coordinate plan with Owner's fire-protection equipment and requirements. Include fire-watch personnel's training, duties, and authority to enforce fire safety.
- D. Safety and Health Standard: Comply with ANSI/ASSE A10.6.

1.7 EXISTING MATERIALS TO REMAIN

- A. Existing Materials to Remain: Protect construction indicated to remain against damage and soiling from construction work. Where permitted by Architect, items may be dismantled and taken to a suitable, protected storage location during construction work and reinstalled in their original locations after alteration and other construction work in the vicinity is complete.

PART 2 - PRODUCTS - (Not Used)

PART 3 - EXECUTION

3.1 PROTECTION

- A. Protect persons, motor vehicles, surrounding surfaces of building, building site, plants, and surrounding buildings from harm resulting from alteration work.
1. Use only proven protection methods, appropriate to each area and surface being protected.
 2. Provide temporary barricades, barriers, and directional signage to exclude the public from areas where alteration work is being performed.
 3. Erect temporary barriers to form and maintain fire-egress routes.
 4. Erect temporary protective covers over walkways and at points of pedestrian and vehicular entrance and exit that must remain in service during alteration work.
 5. Contain dust and debris generated by alteration work and prevent it from reaching the public or adjacent surfaces.
 6. Provide shoring, bracing, and supports as necessary. Do not overload structural elements.
 7. Protect floors and other surfaces along hauling routes from damage, wear, and staining.
 8. Provide supplemental sound-control treatment to isolate demolition work from other areas of the building.
- B. Temporary Protection of Materials to Remain:
1. Protect existing materials with temporary protections and construction. Do not remove existing materials unless otherwise indicated.
 2. Do not attach temporary protection to existing surfaces except as indicated as part of the alteration work program.

- C. Comply with each product manufacturer's written instructions for protections and precautions. Protect against adverse effects of products and procedures on people and adjacent materials, components, and vegetation.
- D. Utility and Communications Services:
 - 1. Notify Owner, Architect, authorities having jurisdiction, and entities owning or controlling wires, conduits, pipes, and other services affected by alteration work before commencing operations.
 - 2. Disconnect and cap pipes and services as required by authorities having jurisdiction, as required for alteration work.
 - 3. Maintain existing services unless otherwise indicated; keep in service and protect against damage during operations. Provide temporary services during interruptions to existing utilities.
- E. Existing Drains: Prior to the start of work in an area, test drainage system to ensure that it is functioning properly. Notify Architect immediately of inadequate drainage or blockage. Do not begin work in an area until the drainage system is functioning properly.
 - 1. Prevent solids such as adhesive or mortar residue or other debris from entering the drainage system. Clean out drains and drain lines that become sluggish or blocked by sand or other materials resulting from alteration work.
 - 2. Protect drains from pollutants. Block drains or filter out sediments, allowing only clean water to pass.
- F. Existing Roofing: Prior to the start of work in an area, install roofing protection as indicated on Drawings.

3.2 PROTECTION FROM FIRE

- A. General: Follow fire-prevention plan and the following:
 - 1. Comply with NFPA 241 requirements unless otherwise indicated.
 - 2. Remove and keep area free of combustibles, including rubbish, paper, waste, and chemicals, unless necessary for the immediate work.
 - a. If combustible material cannot be removed, provide fire blankets to cover such materials.
- B. Heat-Generating Equipment and Combustible Materials: Comply with the following procedures while performing work with heat-generating equipment or combustible materials, including welding, torch-cutting, soldering, brazing, removing paint with heat, or other operations where open flames or implements using high heat or combustible solvents and chemicals are anticipated:
 - 1. Obtain Owner's approval for operations involving use of welding or other high-heat equipment. Use of open-flame equipment is not permitted. Notify Owner at least 72 hours before each occurrence, indicating location of such work.
 - 2. As far as practicable, restrict heat-generating equipment to shop areas or outside the building.
 - 3. Do not perform work with heat-generating equipment in or near rooms or in areas where flammable liquids or explosive vapors are present or thought to be present. Use a combustible gas indicator test to ensure that the area is safe.

4. Use fireproof baffles to prevent flames, sparks, hot gases, or other high-temperature material from reaching surrounding combustible material.
 5. Prevent the spread of sparks and particles of hot metal through open windows, doors, holes, and cracks in floors, walls, ceilings, roofs, and other openings.
 6. Fire Watch: Before working with heat-generating equipment or combustible materials, station personnel to serve as a fire watch at each location where such work is performed. Fire-watch personnel shall have the authority to enforce fire safety. Station fire watch according to NFPA 51B, NFPA 241, and as follows:
 - a. Train each fire watch in the proper operation of fire-control equipment and alarms.
 - b. Prohibit fire-watch personnel from other work that would be a distraction from fire-watch duties.
 - c. Cease work with heat-generating equipment whenever fire-watch personnel are not present.
 - d. Have fire-watch personnel perform final fire-safety inspection each day beginning no sooner than 30 minutes after conclusion of work in each area to detect hidden or smoldering fires and to ensure that proper fire prevention is maintained.
 - e. Maintain fire-watch personnel at each area of Project site until 60 minutes after conclusion of daily work.
- C. Fire-Control Devices: Provide and maintain fire extinguishers, fire blankets, and rag buckets for disposal of rags with combustible liquids. Maintain each as suitable for the type of fire risk in each work area. Ensure that nearby personnel and the fire-watch personnel are trained in fire-extinguisher and blanket use.
- D. Sprinklers: Where sprinkler protection exists and is functional, maintain it without interruption while operations are being performed. If operations are performed close to sprinklers, shield them temporarily with guards.
1. Remove temporary guards at the end of work shifts, whenever operations are paused, and when nearby work is complete.

3.3 PROTECTION DURING APPLICATION OF CHEMICALS

- A. Protect motor vehicles, surrounding surfaces of building, building site, plants, and surrounding buildings from harm or spillage resulting from applications of chemicals and adhesives.
- B. Cover adjacent surfaces with protective materials that are proven to resist chemicals selected for Project unless chemicals being used will not damage adjacent surfaces as indicated in alteration work program. Use covering materials and masking agents that are waterproof and UV resistant and that will not stain or leave residue on surfaces to which they are applied. Apply protective materials according to manufacturer's written instructions. Do not apply liquid masking agents or adhesives to painted or porous surfaces. When no longer needed, promptly remove protective materials.
- C. Do not apply chemicals during winds of sufficient force to spread them to unprotected surfaces.
- D. Neutralize alkaline and acid wastes and legally dispose of off Owner's property.
- E. Collect and dispose of runoff from chemical operations by legal means and in a manner that prevents soil contamination, soil erosion, undermining of paving and foundations, damage to landscaping, or water penetration into building interior.

3.4 GENERAL ALTERATION WORK

- A. Record existing work before each procedure (preconstruction), and record progress during the work. Use digital preconstruction documentation photographs or video recordings.
- B. Perform surveys of Project site as the Work progresses to detect hazards resulting from alterations.
- C. Notify Architect of visible changes in the integrity of material or components whether from environmental causes including biological attack, UV degradation, freezing, or thawing or from structural defects including cracks, movement, or distortion.
 - 1. Do not proceed with the work in question until directed by Architect.

END OF SECTION 01 35 16

SECTION 01 40 00 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - 1. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and -control procedures that facilitate compliance with the Contract Document requirements.
 - 2. Requirements for Contractor to provide quality-assurance and -control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.
 - 3. Specific test and inspection requirements are not specified in this Section.

1.2 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Architect.
- C. Mockups: Full-size physical assemblies that are constructed on-site. Mockups are constructed to verify selections made under Sample submittals; to demonstrate aesthetic effects and, where indicated, qualities of materials and execution; to review coordination, testing, or operation; to show interface between dissimilar materials; and to demonstrate compliance with specified installation tolerances. Mockups are not Samples. Unless otherwise indicated, approved mockups establish the standard by which the Work will be judged.
 - 1. Mockups are used for one or more of the following:
 - a. Verify selections made under Sample submittals.
 - b. Demonstrate aesthetic effects.
 - c. Demonstrate the qualities of products and workmanship.
 - d. Demonstrate successful installation of interfaces between components and systems.
- D. Perform preconstruction testing to determine system performance. Preconstruction Testing: Tests and inspections performed specifically for Project before products and materials are incorporated into the Work, to verify performance or compliance with specified criteria.

- E. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with specified requirements.
- F. Source Quality-Control Testing: Tests and inspections that are performed at the source, e.g., plant, mill, factory, or shop.
- G. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- H. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- I. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
 - 1. Use of trade-specific terminology in referring to a trade or entity does not require that certain construction activities be performed by accredited or unionized individuals, or that requirements specified apply exclusively to specific trade(s).
- J. Experienced: When used with an entity or individual, "experienced" means having successfully completed a minimum of five previous projects similar in nature, size, and extent to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

1.3 CONFLICTING REQUIREMENTS

- A. Referenced Standards: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer conflicting requirements that are different, but apparently equal, to Architect for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

1.4 INFORMATIONAL SUBMITTALS

- A. Contractor's Statement of Responsibility: When required by authorities having jurisdiction, submit copy of written statement of responsibility sent to authorities having jurisdiction before starting work on the following systems:
 - 1. Seismic-force-resisting system, designated seismic system, or component listed in the designated seismic system quality-assurance plan prepared by Architect.
 - 2. Main wind-force-resisting system or a wind-resisting component listed in the wind-force-resisting system quality-assurance plan prepared by Architect.

- B. Testing Agency Qualifications: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.

1.5 REPORTS AND DOCUMENTS

- A. Test and Inspection Reports: Prepare and submit certified written reports specified in other Sections. Include the following:
 - 1. Date of issue.
 - 2. Project title and number.
 - 3. Name, address, and telephone number of testing agency.
 - 4. Dates and locations of samples and tests or inspections.
 - 5. Names of individuals making tests and inspections.
 - 6. Description of the Work and test and inspection method.
 - 7. Identification of product and Specification Section.
 - 8. Complete test or inspection data.
 - 9. Test and inspection results and an interpretation of test results.
 - 10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
 - 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
 - 12. Name and signature of laboratory inspector.
 - 13. Recommendations on retesting and reinspecting.
- B. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.6 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- C. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar in material, design, and extent to those indicated for this Project.

- F. Specialists: Certain Specification Sections require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
 - 1. Requirements of authorities having jurisdiction shall supersede requirements for specialists.
- G. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 329, and with additional qualifications specified in individual Sections; and, where required by authorities having jurisdiction, that is acceptable to authorities.
 - 1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
 - 2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
- H. Manufacturer's Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

1.7 QUALITY CONTROL

- A. Contractor Responsibilities: Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Perform additional quality-control activities required to verify that the Work complies with requirements, whether specified or not.
 - 1. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
 - a. Contractor shall not employ same entity engaged by Owner, unless agreed to in writing by Owner.
 - 2. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
 - 3. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
 - 4. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
 - 5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- B. Testing Agency Responsibilities: Cooperate with Architect and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
 - 1. Notify Architect and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
 - 2. Determine the location from which test samples will be taken and in which in-situ tests are conducted.
 - 3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
 - 4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.

5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
 6. Do not perform any duties of Contractor.
- C. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
1. Access to the Work.
 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
 4. Facilities for storage and field curing of test samples.
 5. Delivery of samples to testing agencies.
 6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
 7. Security and protection for samples and for testing and inspecting equipment at Project site.
- D. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
1. Schedule times for tests, inspections, obtaining samples, and similar activities.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 TEST AND INSPECTION LOG

- A. Test and Inspection Log: Prepare a record of tests and inspections. Include the following:
1. Date test or inspection was conducted.
 2. Description of the Work tested or inspected.
 3. Date test or inspection results were transmitted to Architect.
 4. Identification of testing agency or special inspector conducting test or inspection.
- B. Maintain log at Project site. Post changes and revisions as they occur. Provide access to test and inspection log for Architect's reference during normal working hours.

3.2 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
1. Provide materials and comply with installation requirements specified in other Specification Sections or matching existing substrates and finishes. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible

as possible. Comply with the Contract Document requirements for cutting and patching in Section 017300 "Execution."

- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 01 40 00

SECTION 01 42 00 - REFERENCES

PART 1 - GENERAL

1.1 DEFINITIONS

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. "Approved": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.
- C. "Directed": A command or instruction by Architect. Other terms including "requested," "authorized," "selected," "required," and "permitted" have the same meaning as "directed."
- D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."
- E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. "Install": Unload, temporarily store, unpack, assemble, erect, place, anchor, apply, work to dimension, finish, cure, protect, clean, and similar operations at Project site.
- H. "Provide": Furnish and install, complete and ready for the intended use.
- I. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

1.2 INDUSTRY STANDARDS

- A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
- B. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.
- C. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
 - 1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.

1.3 ABBREVIATIONS AND ACRONYMS

- A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Gale's "Encyclopedia of Associations: National Organizations of the U.S." or in Columbia Books' "National Trade & Professional Associations of the United States."
- B. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list.
1. AABC - Associated Air Balance Council; www.aabc.com.
 2. AAMA - American Architectural Manufacturers Association; www.aamanet.org.
 3. AAPFCO - Association of American Plant Food Control Officials; www.aapfco.org.
 4. AASHTO - American Association of State Highway and Transportation Officials; www.transportation.org.
 5. AATCC - American Association of Textile Chemists and Colorists; www.aatcc.org.
 6. ABMA - American Bearing Manufacturers Association; www.americanbearings.org.
 7. ABMA - American Boiler Manufacturers Association; www.abma.com.
 8. ACI - American Concrete Institute; (Formerly: ACI International); www.abma.com.
 9. ACPA - American Concrete Pipe Association; www.concrete-pipe.org.
 10. AEIC - Association of Edison Illuminating Companies, Inc. (The); www.aeic.org.
 11. AF&PA - American Forest & Paper Association; www.afandpa.org.
 12. AGA - American Gas Association; www.aga.org.
 13. AHAM - Association of Home Appliance Manufacturers; www.aham.org.
 14. AHRI - Air-Conditioning, Heating, and Refrigeration Institute (The); www.ahrinet.org.
 15. AI - Asphalt Institute; www.asphaltinstitute.org.
 16. AIA - American Institute of Architects (The); www.aia.org.
 17. AISC - American Institute of Steel Construction; www.aisc.org.
 18. AISI - American Iron and Steel Institute; www.steel.org.
 19. AITC - American Institute of Timber Construction; www.aitc-glulam.org.
 20. AMCA - Air Movement and Control Association International, Inc.; www.amca.org.
 21. ANSI - American National Standards Institute; www.ansi.org.
 22. AOSA - Association of Official Seed Analysts, Inc.; www.aosaseed.com.
 23. APA - APA - The Engineered Wood Association; www.apawood.org.
 24. APA - Architectural Precast Association; www.archprecast.org.
 25. API - American Petroleum Institute; www.api.org.
 26. ARI - Air-Conditioning & Refrigeration Institute; (See AHRI).
 27. ARI - American Refrigeration Institute; (See AHRI).
 28. ARMA - Asphalt Roofing Manufacturers Association; www.asphaltroofing.org.
 29. ASCE - American Society of Civil Engineers; www.asce.org.
 30. ASCE/SEI - American Society of Civil Engineers/Structural Engineering Institute; (See ASCE).
 31. ASHRAE - American Society of Heating, Refrigerating and Air-Conditioning Engineers; www.ashrae.org.
 32. ASME - ASME International; (American Society of Mechanical Engineers); www.asme.org.
 33. ASSE - American Society of Safety Engineers (The); www.asse.org.
 34. ASSE - American Society of Sanitary Engineering; www.asse-plumbing.org.
 35. ASTM - ASTM International; www.astm.org.
 36. ATIS - Alliance for Telecommunications Industry Solutions; www.atis.org.
 37. AWEA - American Wind Energy Association; www.awea.org.
 38. AWI - Architectural Woodwork Institute; www.awinet.org.
 39. AWMAC - Architectural Woodwork Manufacturers Association of Canada; www.awmac.com.
 40. AWPA - American Wood Protection Association; www.awpa.com.
 41. AWS - American Welding Society; www.aws.org.

42. AWWA - American Water Works Association; www.awwa.org.
43. BHMA - Builders Hardware Manufacturers Association; www.buildershardware.com.
44. BIA - Brick Industry Association (The); www.gobrick.com.
45. BICSI - BICSI, Inc.; www.bicsi.org.
46. BIFMA - BIFMA International; (Business and Institutional Furniture Manufacturer's Association); www.bifma.org.
47. BISSC - Baking Industry Sanitation Standards Committee; www.bissc.org.
48. BWF - Badminton World Federation; (Formerly: International Badminton Federation); www.bissc.org.
49. CDA - Copper Development Association; www.copper.org.
50. CEA - Canadian Electricity Association; www.electricity.ca.
51. CEA - Consumer Electronics Association; www.ce.org.
52. CFFA - Chemical Fabrics and Film Association, Inc.; www.chemicalfabricsandfilm.com.
53. CFSEI - Cold-Formed Steel Engineers Institute; www.cfsei.org.
54. CGA - Compressed Gas Association; www.cganet.com.
55. CIMA - Cellulose Insulation Manufacturers Association; www.cellulose.org.
56. Cisca - Ceilings & Interior Systems Construction Association; www.cisca.org.
57. CISPI - Cast Iron Soil Pipe Institute; www.cispi.org.
58. CLFMI - Chain Link Fence Manufacturers Institute; www.chainlinkinfo.org.
59. CPA - Composite Panel Association; www.pbmdf.com.
60. CRI - Carpet and Rug Institute (The); www.carpet-rug.org.
61. CRRC - Cool Roof Rating Council; www.coolroofs.org.
62. CRSI - Concrete Reinforcing Steel Institute; www.crsi.org.
63. CSA - Canadian Standards Association; www.csa.ca.
64. CSA - CSA International; (Formerly: IAS - International Approval Services); www.csa-international.org.
65. CSI - Construction Specifications Institute (The); www.csinet.org.
66. CSSB - Cedar Shake & Shingle Bureau; www.cedarbureau.org.
67. CTI - Cooling Technology Institute; (Formerly: Cooling Tower Institute); www.cti.org.
68. CWC - Composite Wood Council; (See CPA).
69. DASMA - Door and Access Systems Manufacturers Association; www.dasma.com.
70. DHI - Door and Hardware Institute; www.dhi.org.
71. ECA - Electronic Components Association; (See ECIA).
72. ECAMA - Electronic Components Assemblies & Materials Association; (See ECIA).
73. ECIA - Electronic Components Industry Association; www.eciaonline.org.
74. EIA - Electronic Industries Alliance; (See TIA).
75. EIMA - EIFS Industry Members Association; www.eima.com.
76. EJMA - Expansion Joint Manufacturers Association, Inc.; www.ejma.org.
77. ESD - ESD Association; (Electrostatic Discharge Association); www.esda.org.
78. ESTA - Entertainment Services and Technology Association; (See PLASA).
79. EVO - Efficiency Valuation Organization; www.evo-world.org.
80. FCI - Fluid Controls Institute; www.fluidcontrolsintitute.org.
81. FIBA - Federation Internationale de Basketball; (The International Basketball Federation); www.fiba.com.
82. FIVB - Federation Internationale de Volleyball; (The International Volleyball Federation); www.fivb.org.
83. FM Approvals - FM Approvals LLC; www.fmglobal.com.
84. FM Global - FM Global; (Formerly: FMG - FM Global); www.fmglobal.com.
85. FRSA - Florida Roofing, Sheet Metal & Air Conditioning Contractors Association, Inc.; www.floridarroof.com.
86. FSA - Fluid Sealing Association; www.fluidsealing.com.
87. FSC - Forest Stewardship Council U.S.; www.fscus.org.
88. GA - Gypsum Association; www.gypsum.org.
89. GANA - Glass Association of North America; www.glasswebsite.com.
90. GS - Green Seal; www.greenseal.org.
91. HI - Hydraulic Institute; www.pumps.org.

92. HI/GAMA - Hydronics Institute/Gas Appliance Manufacturers Association; (See AHRI).
93. HMMA - Hollow Metal Manufacturers Association; (See NAAMM).
94. HPVA - Hardwood Plywood & Veneer Association; www.hpva.org.
95. HPW - H. P. White Laboratory, Inc.; www.hpwhite.com.
96. IAPSC - International Association of Professional Security Consultants; www.iapsc.org.
97. IAS - International Accreditation Service; www.iasonline.org.
98. IAS - International Approval Services; (See CSA).
99. ICBO - International Conference of Building Officials; (See ICC).
100. ICC - International Code Council; www.iccsafe.org.
101. ICEA - Insulated Cable Engineers Association, Inc.; www.icea.net.
102. ICPA - International Cast Polymer Alliance; www.icpa-hq.org.
103. ICRI - International Concrete Repair Institute, Inc.; www.icri.org.
104. IEC - International Electrotechnical Commission; www.iec.ch.
105. IEEE - Institute of Electrical and Electronics Engineers, Inc. (The); www.ieee.org.
106. IES - Illuminating Engineering Society; (Formerly: Illuminating Engineering Society of North America); www.ies.org.
107. IESNA - Illuminating Engineering Society of North America; (See IES).
108. IEST - Institute of Environmental Sciences and Technology; www.iest.org.
109. IGMA - Insulating Glass Manufacturers Alliance; www.igmaonline.org.
110. IGSHPA - International Ground Source Heat Pump Association; www.igshpa.okstate.edu.
111. ILI - Indiana Limestone Institute of America, Inc.; www.iliai.com.
112. Intertek - Intertek Group; (Formerly: ETL SEMCO; Intertek Testing Service NA); www.intertek.com.
113. ISA - International Society of Automation (The); (Formerly: Instrumentation, Systems, and Automation Society); www.isa.org.
114. ISAS - Instrumentation, Systems, and Automation Society (The); (See ISA).
115. ISFA - International Surface Fabricators Association; (Formerly: International Solid Surface Fabricators Association); www.isfanow.org.
116. ISO - International Organization for Standardization; www.iso.org.
117. ISSFA - International Solid Surface Fabricators Association; (See ISFA).
118. ITU - International Telecommunication Union; www.itu.int/home.
119. KCMA - Kitchen Cabinet Manufacturers Association; www.kcma.org.
120. LMA - Laminating Materials Association; (See CPA).
121. LPI - Lightning Protection Institute; www.lightning.org.
122. MBMA - Metal Building Manufacturers Association; www.mbma.com.
123. MCA - Metal Construction Association; www.metalconstruction.org.
124. MFMA - Maple Flooring Manufacturers Association, Inc.; www.maplefloor.org.
125. MFMA - Metal Framing Manufacturers Association, Inc.; www.metalframingmfg.org.
126. MHIA - Material Handling Industry of America; www.mhia.org.
127. MIA - Marble Institute of America; www.marble-institute.com.
128. MMPA - Moulding & Millwork Producers Association; www.wmmpa.com.
129. MPI - Master Painters Institute; www.paintinfo.com.
130. MSS - Manufacturers Standardization Society of The Valve and Fittings Industry Inc.; www.mss-hq.org.
131. NAAMM - National Association of Architectural Metal Manufacturers; www.naamm.org.
132. NACE - NACE International; (National Association of Corrosion Engineers International); www.nace.org.
133. NADCA - National Air Duct Cleaners Association; www.nadca.com.
134. NAIMA - North American Insulation Manufacturers Association; www.naima.org.
135. NBGQA - National Building Granite Quarries Association, Inc.; www.nbgqa.com.
136. NBI - New Buildings Institute; www.newbuildings.org.
137. NCAA - National Collegiate Athletic Association (The); www.ncaa.org.
138. NCMA - National Concrete Masonry Association; www.ncma.org.
139. NEBB - National Environmental Balancing Bureau; www.nebb.org.
140. NECA - National Electrical Contractors Association; www.necanet.org.
141. NeLMA - Northeastern Lumber Manufacturers Association; www.nelma.org.

142. NEMA - National Electrical Manufacturers Association; www.nema.org.
143. NETA - InterNational Electrical Testing Association; www.netaworld.org.
144. NFHS - National Federation of State High School Associations; www.nfhs.org.
145. NFPA - National Fire Protection Association; www.nfpa.org.
146. NFPA - NFPA International; (See NFPA).
147. NFRC - National Fenestration Rating Council; www.nfrc.org.
148. NHLA - National Hardwood Lumber Association; www.nhla.com.
149. NLGA - National Lumber Grades Authority; www.nlga.org.
150. NOFMA - National Oak Flooring Manufacturers Association; (See NWFA).
151. NOMMA - National Ornamental & Miscellaneous Metals Association; www.nomma.org.
152. NRCA - National Roofing Contractors Association; www.nrca.net.
153. NRMCA - National Ready Mixed Concrete Association; www.nrmca.org.
154. NSF - NSF International; www.nsf.org.
155. NSPE - National Society of Professional Engineers; www.nspe.org.
156. NSSGA - National Stone, Sand & Gravel Association; www.nssga.org.
157. NTMA - National Terrazzo & Mosaic Association, Inc. (The); www.ntma.com.
158. NWFA - National Wood Flooring Association; www.nwfa.org.
159. PCI - Precast/Prestressed Concrete Institute; www.pci.org.
160. PDI - Plumbing & Drainage Institute; www.pdionline.org.
161. PLASA - PLASA; (Formerly: ESTA - Entertainment Services and Technology Association); www.plasa.org.
162. RCSC - Research Council on Structural Connections; www.boltcouncil.org.
163. RFCI - Resilient Floor Covering Institute; www.rfci.com.
164. RIS - Redwood Inspection Service; www.redwoodinspection.com.
165. SAE - SAE International; www.sae.org.
166. SCTE - Society of Cable Telecommunications Engineers; www.scte.org.
167. SDI - Steel Deck Institute; www.sdi.org.
168. SDI - Steel Door Institute; www.steeldoor.org.
169. SEFA - Scientific Equipment and Furniture Association (The); www.sefalabs.com.
170. SEI/ASCE - Structural Engineering Institute/American Society of Civil Engineers; (See ASCE).
171. SIA - Security Industry Association; www.siaonline.org.
172. SJI - Steel Joist Institute; www.steeljoist.org.
173. SMA - Screen Manufacturers Association; www.smainfo.org.
174. SMACNA - Sheet Metal and Air Conditioning Contractors' National Association; www.smacna.org.
175. SMPTE - Society of Motion Picture and Television Engineers; www.smpte.org.
176. SPFA - Spray Polyurethane Foam Alliance; www.sprayfoam.org.
177. SPIB - Southern Pine Inspection Bureau; www.spib.org.
178. SPRI - Single Ply Roofing Industry; www.spri.org.
179. SRCC - Solar Rating & Certification Corporation; www.solar-rating.org.
180. SSINA - Specialty Steel Industry of North America; www.ssina.com.
181. SSPC - SSPC: The Society for Protective Coatings; www.sspc.org.
182. STI - Steel Tank Institute; www.steeltank.com.
183. SWI - Steel Window Institute; www.steelwindows.com.
184. SWPA - Submersible Wastewater Pump Association; www.swpa.org.
185. TCA - Tilt-Up Concrete Association; www.tilt-up.org.
186. TCNA - Tile Council of North America, Inc.; www.tileusa.com.
187. TEMA - Tubular Exchanger Manufacturers Association, Inc.; www.tema.org.
188. TIA - Telecommunications Industry Association (The); (Formerly: TIA/EIA - Telecommunications Industry Association/Electronic Industries Alliance); www.tiaonline.org.
189. TIA/EIA - Telecommunications Industry Association/Electronic Industries Alliance; (See TIA).
190. TMS - The Masonry Society; www.masonrysociety.org.
191. TPI - Truss Plate Institute; www.tpinst.org.

192. TPI - Turfgrass Producers International; www.turfgrasssod.org.
193. TRI - Tile Roofing Institute; www.tilerroofing.org.
194. UL - Underwriters Laboratories Inc.; www.ul.com.
195. UNI - Uni-Bell PVC Pipe Association; www.uni-bell.org.
196. USAV - USA Volleyball; www.usavolleyball.org.
197. USGBC - U.S. Green Building Council; www.usgbc.org.
198. USITT - United States Institute for Theatre Technology, Inc.; www.usitt.org.
199. WASTEC - Waste Equipment Technology Association; www.wastec.org.
200. WCLIB - West Coast Lumber Inspection Bureau; www.wclib.org.
201. WCMA - Window Covering Manufacturers Association; www.wcmanet.org.
202. WDMA - Window & Door Manufacturers Association; www.wdma.com.
203. WI - Woodwork Institute; www.wicnet.org.
204. WSRCA - Western States Roofing Contractors Association; www.wsrca.com.
205. WWPA - Western Wood Products Association; www.wwpa.org.

C. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list.

1. DIN - Deutsches Institut für Normung e.V.; www.din.de.
2. IAPMO - International Association of Plumbing and Mechanical Officials; www.iapmo.org.
3. ICC - International Code Council; www.iccsafe.org.
4. ICC-ES - ICC Evaluation Service, LLC; www.icc-es.org.

D. Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list.

1. COE - Army Corps of Engineers; www.usace.army.mil.
2. CPSC - Consumer Product Safety Commission; www.cpsc.gov.
3. DOC - Department of Commerce; National Institute of Standards and Technology; www.nist.gov.
4. DOD - Department of Defense; www.quicksearch.dla.mil.
5. DOE - Department of Energy; www.energy.gov.
6. EPA - Environmental Protection Agency; www.epa.gov.
7. FAA - Federal Aviation Administration; www.faa.gov.
8. FG - Federal Government Publications; www.gpo.gov.
9. GSA - General Services Administration; www.gsa.gov.
10. HUD - Department of Housing and Urban Development; www.hud.gov.
11. LBL - Lawrence Berkeley National Laboratory; Environmental Energy Technologies Division; www.eetd.lbl.gov.
12. OSHA - Occupational Safety & Health Administration; www.osha.gov.
13. SD - Department of State; www.state.gov.
14. TRB - Transportation Research Board; National Cooperative Highway Research Program; The National Academies; www.trb.org.
15. USDA - Department of Agriculture; Agriculture Research Service; U.S. Salinity Laboratory; www.ars.usda.gov.
16. USDA - Department of Agriculture; Rural Utilities Service; www.usda.gov.
17. USDJ - Department of Justice; Office of Justice Programs; National Institute of Justice; www.ojp.usdoj.gov.
18. USP - U.S. Pharmacopeial Convention; www.usp.org.
19. USPS - United States Postal Service; www.usps.com.

E. Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations in the following list.

1. CFR - Code of Federal Regulations; Available from Government Printing Office; www.gpo.gov/fdsys.
 2. DOD - Department of Defense; Military Specifications and Standards; Available from DLA Document Services; www.quicksearch.dla.mil.
 3. DSCC - Defense Supply Center Columbus; (See FS).
 4. FED-STD - Federal Standard; (See FS).
 5. FS - Federal Specification; Available from DLA Document Services; www.quicksearch.dla.mil.
 - a. Available from Defense Standardization Program; www.dsp.dla.mil.
 - b. Available from General Services Administration; www.gsa.gov.
 - c. Available from National Institute of Building Sciences/Whole Building Design Guide; www.wbdg.org/ccb.
 6. MILSPEC - Military Specification and Standards; (See DOD).
 7. USAB - United States Access Board; www.access-board.gov.
 8. USATBCB - U.S. Architectural & Transportation Barriers Compliance Board; (See USAB).
- F. State Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list.
1. CBHF; State of California; Department of Consumer Affairs; Bureau of Electronic and Appliance Repair, Home Furnishings and Thermal Insulation; www.bearhfti.ca.gov.
 2. CCR; California Code of Regulations; Office of Administrative Law; California Title 24 Energy Code; www.calregs.com.
 3. CDHS; California Department of Health Services; (See CDPH).
 4. CDPH; California Department of Public Health; Indoor Air Quality Program; www.cal-iaq.org.
 5. CPUC; California Public Utilities Commission; www.cpuc.ca.gov.
 6. SCAQMD; South Coast Air Quality Management District; www.aqmd.gov.
 7. TFS; Texas A&M Forest Service; Sustainable Forestry and Economic Development; www.txforestservation.tamu.edu.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 42 00

SECTION 01 50 00 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.

1.2 USE CHARGES

- A. General: Installation and removal of and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Owner's construction forces, Architect, occupants of Project, testing agencies, and authorities having jurisdiction.
- B. Water and Sewer Service from Existing System: Water from Owner's existing water system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.
- C. Electric Power Service from Existing System: Electric power from Owner's existing system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

1.3 INFORMATIONAL SUBMITTALS

- A. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.
- B. Erosion- and Sedimentation-Control Plan: Show compliance with requirements of EPA Construction General Permit or authorities having jurisdiction, whichever is more stringent.
- C. Fire-Safety Program: Show compliance with requirements of NFPA 241 and authorities having jurisdiction. Indicate Contractor personnel responsible for management of fire prevention program.

1.4 QUALITY ASSURANCE

- A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.
- C. Accessible Temporary Egress: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines and ICC/ANSI A117.1.

1.5 PROJECT CONDITIONS

- A. Temporary Use of Permanent Facilities: Engage Installer of each permanent service to assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

PART 2 - PRODUCTS

2.1 TEMPORARY FACILITIES

- A. Common-Use Field Office: Of sufficient size to accommodate needs of Owner, Architect, and construction personnel office activities and to accommodate Project meetings specified in other Division 01 Sections. Keep office clean and orderly.

2.2 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.
- B. HVAC Equipment: Unless Owner authorizes use of permanent HVAC system, provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.
 - 1. Use of gasoline-burning space heaters, open-flame heaters, or salamander-type heating units is prohibited.
 - 2. Heating Units: Listed and labeled for type of fuel being consumed, by a qualified testing agency acceptable to authorities having jurisdiction and marked for intended location and application.
 - 3. Permanent HVAC System: If Owner authorizes use of permanent HVAC system for temporary use during construction, provide filter with MERV of **8** at each return-air grille in system and remove at end of construction and clean HVAC system as required in Section 017700 "Closeout Procedures".

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
 - 1. Locate facilities to limit site disturbance as specified in Section 011000 "Summary."
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.2 TEMPORARY UTILITY INSTALLATION

- A. General: Install temporary service or connect to existing service.

1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Sewers and Drainage: Provide temporary utilities to remove effluent lawfully.
 1. Connect temporary sewers to municipal system as directed by authorities having jurisdiction.
- C. Water Service: Connect to Owner's existing water service facilities. Clean and maintain water service facilities in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.
- D. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
- E. Electric Power Service: Connect to Owner's existing electric power service. Maintain equipment in a condition acceptable to Owner.
- F. Electric Power Service: Provide electric power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations.
 1. Install electric power service unless otherwise indicated.
 2. Connect temporary service to Owner's existing power source, as directed by Owner.
- G. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.
 1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.
- H. Cellphone Service: Provide temporary telephone service in common-use facilities for use by all construction personnel. Provide one telephone line for each field office.
 1. Provide superintendent with cellular telephone or portable two-way radio for use when away from field office.

3.3 SUPPORT FACILITIES INSTALLATION

- A. General: Comply with the following:
 1. Provide construction for temporary offices, shops, and sheds located within construction area or within 30 feet (9 m) of building lines that is noncombustible according to ASTM E 136. Comply with NFPA 241.
 2. Maintain support facilities until Architect schedules Substantial Completion inspection. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.
- B. Parking: Provide temporary or use designated areas of Owner's existing site areas for construction personnel.
- C. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.

1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties or endanger permanent Work or temporary facilities.
 2. Remove snow and ice as required to minimize accumulations.
- D. Project Signs: Provide Project signs as indicated. Unauthorized signs are not permitted.
1. Identification Signs: Provide Project identification signs as indicated on Drawings.
 2. Temporary Signs: Provide other signs as indicated and as required to inform public and individuals seeking entrance to Project.
 - a. Provide temporary, directional signs for construction personnel and visitors.
 3. Maintain and touchup signs so they are legible at all times.
- E. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with progress cleaning requirements in Section 017300 "Execution."

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.
- B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- C. Temporary Erosion and Sedimentation Control: Comply with requirements of 2003 EPA Construction General Permit or authorities having jurisdiction, whichever is more stringent.
- D. Stormwater Control: Comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.
- E. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.
- F. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- G. Temporary Egress: Maintain temporary egress from existing occupied facilities as indicated and as required by authorities having jurisdiction.

3.5 MOISTURE AND MOLD CONTROL

- A. Contractor's Moisture Protection Plan: Avoid trapping water in finished work. Document visible signs of mold that may appear during construction.

3.6 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal.
 - 1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
- C. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.
- D. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
 - 1. Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.
 - 2. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period. Comply with final cleaning requirements specified in Section 017700 "Closeout Procedures."

END OF SECTION 01 50 00

SECTION 01 60 00 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.

1.2 DEFINITIONS

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

1.3 ACTION SUBMITTALS

- A. Comparable Product Requests: Submit request for consideration of each comparable product. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within one week of receipt of a comparable product request. Architect will notify Contractor of approval or rejection of proposed comparable product request within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
 - a. Form of Approval: As specified in Section 013300 "Submittal Procedures."
 - b. Use product specified if Architect does not issue a decision on use of a comparable product request within time allocated.

- B. Basis-of-Design Product Specification Submittal: Comply with requirements in Section 013300 "Submittal Procedures." Show compliance with requirements.

1.4 QUALITY ASSURANCE

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

1.5 PRODUCT DELIVERY, STORAGE, AND HANDLING

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

1.6 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
 - 1. Manufacturer's Warranty: Written warranty furnished by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
 - 2. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for Owner.

- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution.
 - 1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
 - 2. Specified Form: When specified forms are included with the Specifications, prepare a written document using indicated form properly executed.
 - 3. Refer to other Sections for specific content requirements and particular requirements for submitting special warranties.
- C. Submittal Time: Comply with requirements in Section 017700 "Closeout Procedures."

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.
 - 1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 - 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 - 3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
 - 4. Where products are accompanied by the term "as selected," Architect will make selection.
 - 5. Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.
- B. Product Selection Procedures:
 - 1. Product: Where Specifications name a single manufacturer and product, provide the named product that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
 - 2. Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
 - 3. Products:
 - a. Restricted List: Where Specifications include a list of names of both manufacturers and products, provide one of the products listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
 - b. Nonrestricted List: Where Specifications include a list of names of both available manufacturers and products, provide one of the products listed, or an unnamed product, that complies with requirements. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product.
 - 4. Manufacturers:

- a. Restricted List: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
 - b. Nonrestricted List: Where Specifications include a list of available manufacturers, provide a product by one of the manufacturers listed, or a product by an unnamed manufacturer, that complies with requirements. Comply with requirements in "Comparable Products" Article for consideration of an unnamed manufacturer's product.
5. Basis-of-Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product by one of the other named manufacturers.
- C. Visual Matching Specification: Where Specifications require "match Architect's sample", provide a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches.
1. If no product available within specified category matches and complies with other specified requirements, comply with requirements in Section 012500 "Substitution Procedures" for proposal of product.
- D. Visual Selection Specification: Where Specifications include the phrase "as selected by Architect from manufacturer's full range" or similar phrase, select a product that complies with requirements. Architect will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.2 COMPARABLE PRODUCTS

- A. Conditions for Consideration: Architect will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Architect may return requests without action, except to record noncompliance with these requirements:
1. Evidence that the proposed product does not require revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
 2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
 3. Evidence that proposed product provides specified warranty.
 4. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
 5. Samples, if requested.

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 60 00

SECTION 01 73 00 - EXECUTION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:
 - 1. Construction layout.
 - 2. Field engineering and surveying.
 - 3. Installation of the Work.
 - 4. Cutting and patching.
 - 5. Progress cleaning.
 - 6. Starting and adjusting.
 - 7. Protection of installed construction.

1.2 QUALITY ASSURANCE

- A. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.
 - 1. Structural Elements: When cutting and patching structural elements, notify Architect of locations and details of cutting and await directions from Architect before proceeding. Shore, brace, and support structural element during cutting and patching. Do not cut and patch structural elements in a manner that could change their load-carrying capacity or increase deflection
 - 2. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.
 - 3. Other Construction Elements: Do not cut and patch other construction elements or components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety.
 - 4. Visual Elements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.

- B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
 - 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to Architect for the visual and functional performance of in-place materials.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Existing Conditions: The existence and location of utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of utilities, mechanical and electrical systems, and other construction affecting the Work.
 - 1. Furnish location data for work related to Project that must be performed by public utilities serving Project site.
- B. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
 - 1. Examine existing mechanical and electrical systems to verify actual locations of connections before installation of new materials.
 - 2. Examine walls and roofs for suitable conditions where products and systems are to be installed.
 - 3. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
- C. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Existing Utility Information: Furnish information to local utility and Owner that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.
- B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- C. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of Contractor, submit a request for information to Architect according to requirements in Section 013100 "Project Management and Coordination."

3.3 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Architect promptly.
- B. Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and rim and invert elevations.

3.4 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
 - 1. Make vertical work plumb and make horizontal work level.
 - 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
 - 3. Conceal pipes, ducts, and wiring in finished areas unless otherwise indicated.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Sequence the Work and allow adequate clearances to accommodate movement of construction items on site and placement in permanent locations.
- F. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
- G. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
- H. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.
 - 1. Allow for building movement, including thermal expansion and contraction.
 - 2. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- I. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- J. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.5 CUTTING AND PATCHING

- A. Cutting and Patching, General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
 - 1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- B. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.
- C. Temporary Support: Provide temporary support of work to be cut.
- D. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- E. Adjacent Occupied Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- F. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to minimize and prevent interruption to occupied areas.
- G. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
 - 1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 - 2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
 - 3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
 - 4. Proceed with patching after construction operations requiring cutting are complete.
- H. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other work. Patch with durable seams that are as invisible as practicable. Provide materials and comply with installation requirements specified in other Sections, where applicable.
 - 1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate physical integrity of installation.
 - 2. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition and ensures thermal and moisture integrity of building enclosure.
- I. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

3.6 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.
 - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 - 2. Do not hold waste materials more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F (27 deg C).
 - 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
 - 1. Remove liquid spills promptly.
 - 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- G. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways.
- H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.7 STARTING AND ADJUSTING

- A. Adjust equipment for proper operation. Adjust operating components for proper operation without binding.
- B. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

3.8 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Comply with manufacturer's written instructions for temperature and relative humidity.

END OF SECTION 01 73 00

SECTION 01 77 00 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Substantial Completion procedures.
 - 2. Final completion procedures.
 - 3. Warranties.
 - 4. Final cleaning.
 - 5. Repair of the Work.
- B. Related Requirements:
 - 1. Section 017823 "Operation and Maintenance Data" for operation and maintenance manual requirements.
 - 2. Section 017839 "Project Record Documents" for submitting record Drawings, record Specifications, and record Product Data.
 - 3. Section 017900 "Demonstration and Training" for requirements for instructing Owner's personnel.

1.2 ACTION SUBMITTALS

- A. Product Data: For cleaning agents.
- B. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.
- C. Certified List of Incomplete Items: Final submittal at Final Completion.

1.3 CLOSEOUT SUBMITTALS

- A. Certificates of Release: From authorities having jurisdiction.
- B. Certificate of Insurance: For continuing coverage.

1.4 MAINTENANCE MATERIAL SUBMITTALS

- A. Schedule of Maintenance Material Items: For maintenance material submittal items specified in other Sections.

1.5 SUBSTANTIAL COMPLETION PROCEDURES

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.

- B. Submittals Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 2. Submit closeout submittals specified in other Division 01 Sections, including project record documents, maintenance manuals, final completion construction photographic documentation, damage or settlement surveys, property surveys, and similar final record information.
 3. Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 4. Submit maintenance material submittals specified in individual Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Architect. Label with manufacturer's name and model number where applicable.
 - a. Schedule of Maintenance Material Items: Prepare and submit schedule of maintenance material submittal items, including name and quantity of each item and name and number of related Specification Section. Obtain Architect's signature for receipt of submittals.
- C. Procedures Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
1. Advise Owner of pending insurance changeover requirements.
 2. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
 3. Instruct Owner's personnel in maintenance of products. Submit demonstration and training video recordings specified in Section 017900 "Demonstration and Training."
 4. Advise Owner of changeover in heat and other utilities.
 5. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
 6. Complete final cleaning requirements, including sealing of masonry.
- D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of 10 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.
1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
 2. Results of completed inspection will form the basis of requirements for final completion.

1.6 FINAL COMPLETION PROCEDURES

- A. Preliminary Procedures: Before requesting final inspection for determining final completion, complete the following:

1. Submit a final Application for Payment according to "*Payments*" section under "*General Terms and Conditions*."
 2. Certified List of Incomplete Items: Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
 4. Instruct Owner's personnel in maintenance of products.
- B. Inspection: Submit a written request for final inspection to determine acceptance. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.7 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction. **Use CSI Form 14.1A.**
1. Organize list of spaces in sequential order.
 2. Submit list of incomplete items in the following format:
 - a. MS Excel electronic file. Architect will return annotated copy.
 - b. Three paper copies unless otherwise indicated. Architect will return two copies.
- B. **All items to be completed by Contractor before punch list is reviewed by Architect. A maximum of two trips to review the punch list items will take place. Additional time reviewing punch list items will be billed to the Contractor at the normal billing rate.**

1.8 SUBMITTAL OF PROJECT WARRANTIES

- A. Time of Submittal: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated, or when delay in submittal of warranties might limit Owner's rights under warranty.
- B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch (215-by-280-mm) paper.
 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.

4. Warranty Electronic File: Scan warranties and bonds and assemble complete warranty and bond submittal package into a single indexed electronic PDF file with links enabling navigation to each item. Provide bookmarked table of contents at beginning of document.
- C. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.
1. Use cleaning products that comply with Green Seal's GS-37, or if GS-37 is not applicable, use products that comply with the California Code of Regulations maximum allowable VOC levels.

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:
 - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
 - c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
 - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
 - e. Remove snow and ice to provide safe access to building.
 - f. Clean exposed exterior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 - g. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
 - h. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.

- i. Remove labels that are not permanent.
- j. Wipe surfaces of mechanical and electrical equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
- k. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency.
- l. Leave Project clean.

3.2 REPAIR OF THE WORK

- A. Complete repair and restoration operations before requesting inspection for determination of Substantial Completion.
- B. Repair or remove and replace defective construction. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to specified condition.
 - 1. Remove and replace chipped, scratched, and broken glass, reflective surfaces, and other damaged transparent materials.
 - 2. Touch up and otherwise repair and restore marred or exposed finishes and surfaces. Replace finishes and surfaces that already show evidence of repair or restoration.
 - a. Do not paint over "UL" and other required labels and identification, including mechanical and electrical nameplates. Remove paint applied to required labels and identification.
 - 3. Replace parts subject to operating conditions during construction that may impede operation or reduce longevity.
 - 4. Replace burned-out bulbs, bulbs noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.

END OF SECTION 01 77 00

SECTION 01 78 23 - MAINTENANCE DATA

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for preparing maintenance manuals, including the following:
 - 1. Product maintenance manuals.

1.2 CLOSEOUT SUBMITTALS

- A. Manual Content: Maintenance manual content is specified in individual Specification Sections to be reviewed at the time of Section submittals. Submit reviewed manual content formatted and organized as required by this Section.
 - 1. Architect will comment on whether content of operations and maintenance submittals are acceptable.
 - 2. Where applicable, clarify and update reviewed manual content to correspond to revisions and field conditions.
- B. Format: Submit maintenance manuals in the following format:
 - 1. PDF electronic file. Assemble each manual into a composite electronically indexed file. Submit on digital media acceptable to Architect.
 - a. Name each indexed document file in composite electronic index with applicable item name. Include a complete electronically linked operation and maintenance directory.
 - b. Enable inserted reviewer comments on draft submittals.
 - 2. Three paper copies. Include a complete operation and maintenance directory. Enclose title pages and directories in clear plastic sleeves. Architect will return two copies.
- C. Manual Submittal: Submit each manual in final form prior to requesting inspection for Substantial Completion and at least 15 days before commencing demonstration and training. Architect will return copy with comments.
 - 1. Correct or revise each manual to comply with Architect's comments. Submit copies of each corrected manual within 15 days of receipt of Architect's comments and prior to commencing demonstration and training.

PART 2 - PRODUCTS

2.1 PRODUCT MAINTENANCE MANUALS

- A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.

- B. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.
- C. Product Information: Include the following, as applicable:
 - 1. Product name and model number.
 - 2. Manufacturer's name.
 - 3. Color, pattern, and texture.
 - 4. Material and chemical composition.
 - 5. Reordering information for specially manufactured products.
- D. Maintenance Procedures: Include manufacturer's written recommendations and the following:
 - 1. Inspection procedures.
 - 2. Types of cleaning agents to be used and methods of cleaning.
 - 3. List of cleaning agents and methods of cleaning detrimental to product.
 - 4. Schedule for routine cleaning and maintenance.
 - 5. Repair instructions.
- E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

PART 3 - EXECUTION

3.1 MANUAL PREPARATION

- A. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- B. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.
- C. Comply with Section 017700 "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

END OF SECTION 01 78 23

SECTION 01 78 39 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for project record documents, including the following:
 - 1. Record Drawings.
 - 2. Record Specifications.
 - 3. Record Product Data.
- B. Related Requirements:
 - 1. Section 017823 "Maintenance Data" for maintenance manual requirements.

1.2 CLOSEOUT SUBMITTALS

- A. Record Drawings: Comply with the following:
 - 1. Number of Copies: Submit copies of record Drawings as follows:
 - a. Initial Submittal:
 - 1) Submit one paper-copy set of marked-up record prints.
 - 2) Architect will indicate whether general scope of changes, additional information recorded, and quality of drafting are acceptable.
 - b. Final Submittal:
 - 1) Submit three paper-copy set(s) of marked-up record prints.
 - 2) Print each drawing, whether or not changes and additional information were recorded.
- B. Record Specifications: Submit one paper copy of Project's Specifications, including addenda and contract modifications.
- C. Record Product Data: Submit one paper copy of each submittal.

PART 2 - PRODUCTS

2.1 RECORD DRAWINGS

- A. Record Prints: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings, incorporating new and revised Drawings as modifications are issued.
 - 1. Preparation: Mark record prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether

individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.

- a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
 - b. Record data as soon as possible after obtaining it.
 - c. Record and check the markup before enclosing concealed installations.
 2. Mark the Contract Drawings and Shop Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up record prints.
 3. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
 4. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
- B. Record Digital Data Files: Immediately before inspection for Certificate of Substantial Completion, review marked-up record prints with Architect. When authorized, prepare a full set of corrected digital data files of the Contract Drawings, as follows:
1. Format: Annotated PDF electronic file with comment function enabled.
 2. Incorporate changes and additional information previously marked on record prints. Delete, redraw, and add details and notations where applicable.
 3. Refer instances of uncertainty to Architect for resolution.
 4. Architect will furnish Contractor one set of digital data files of the Contract Drawings for use in recording information.
- C. Format: Identify and date each record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
1. Record Prints: Organize record prints and newly prepared record Drawings into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
 2. Format: Annotated PDF electronic file with comment function enabled.
 3. Record Digital Data Files: Organize digital data information into separate electronic files that correspond to each sheet of the Contract Drawings. Name each file with the sheet identification. Include identification in each digital data file.
 4. Identification: As follows:
 - a. Project name.
 - b. Date.
 - c. Designation "PROJECT RECORD DRAWINGS."
 - d. Name of Architect.
 - e. Name of Contractor.

2.2 RECORD SPECIFICATIONS

- A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 2. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.

3. Note related Change Orders, record Product Data, and record Drawings where applicable.
- B. Format: Submit record Specifications as annotated paper copy.

2.3 RECORD PRODUCT DATA

- A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
 3. Note related Change Order, record Specifications, and record Drawings where applicable.
- B. Format: Submit record Product Data as paper copy.

2.4 MISCELLANEOUS RECORD SUBMITTALS

- A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.
- B. Format: Submit miscellaneous record submittals as paper copy.

PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

- A. Recording: Maintain one copy of each submittal during the construction period for project record document purposes. Post changes and revisions to project record documents as they occur; do not wait until end of Project.
- B. Maintenance of Record Documents and Samples: Store record documents and Samples in the field office apart from the Contract Documents used for construction. Do not use project record documents for construction purposes. Maintain record documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to project record documents for Architect's reference during normal working hours.

END OF SECTION 01 78 39

SECTION 01 79 00 - DEMONSTRATION AND TRAINING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for instructing Owner's personnel, including the following:
 - 1. Demonstration of operation of systems, subsystems, and equipment.
 - 2. Training in operation and maintenance of systems, subsystems, and equipment.
 - 3. Demonstration and training video recordings.

1.2 INFORMATIONAL SUBMITTALS

- A. Instruction Program: Submit outline of instructional program for demonstration and training, including a list of training modules and a schedule of proposed dates, times, length of instruction time, and instructors' names for each training module. Include learning objective and outline for each training module.
 - 1. Indicate proposed training modules using manufacturer-produced demonstration and training video recordings for systems, equipment, and products in lieu of video recording of live instructional module.

1.3 CLOSEOUT SUBMITTALS

- A. Demonstration and Training Video Recordings: Submit two copies within seven days of end of each training module.
 - 1. At completion of training, submit complete training manual(s) for Owner's use prepared and bound in format matching operation and maintenance manuals.

1.4 QUALITY ASSURANCE

- A. Facilitator Qualifications: A firm or individual experienced in training or educating maintenance personnel in a training program similar in content and extent to that indicated for this Project, and whose work has resulted in training or education with a record of successful learning performance.
- B. Instructor Qualifications: A factory-authorized service representative, complying with requirements in Section 014000 "Quality Requirements," experienced in operation and maintenance procedures and training.
- C. Preinstruction Conference: Conduct conference at Project site to comply with requirements in Section 013100 "Project Management and Coordination." Review methods and procedures related to demonstration and training.

1.5 COORDINATION

- A. Coordinate instruction schedule with Owner's operations. Adjust schedule as required to minimize disrupting Owner's operations and to ensure availability of Owner's personnel.
- B. Coordinate content of training modules with content of approved emergency, operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data has been reviewed and approved by Architect.

PART 2 - PRODUCTS

2.1 INSTRUCTION PROGRAM

- A. Program Structure: Develop an instruction program that includes individual training modules for each system and for equipment not part of a system, as required by individual Specification Sections.
- B. Training Modules: Develop a learning objective and teaching outline for each module. Include a description of specific skills and knowledge that participant is expected to master. For each module, include instruction for the following as applicable to the system, equipment, or component:
 - 1. Basis of System Design, Operational Requirements, and Criteria: Include the following:
 - a. System, subsystem, and equipment descriptions.
 - b. Performance and design criteria if Contractor is delegated design responsibility.
 - c. Operating standards.
 - d. Regulatory requirements.
 - e. Equipment function.
 - f. Operating characteristics.
 - g. Limiting conditions.
 - h. Performance curves.
 - 2. Documentation: Review the following items in detail:
 - a. Emergency manuals.
 - b. Operations manuals.
 - c. Maintenance manuals.
 - d. Project record documents.
 - e. Identification systems.
 - f. Warranties and bonds.
 - g. Maintenance service agreements and similar continuing commitments.
 - 3. Maintenance: Include the following:
 - a. Inspection procedures.
 - b. Types of cleaning agents to be used and methods of cleaning.
 - c. List of cleaning agents and methods of cleaning detrimental to product.
 - d. Procedures for routine cleaning
 - e. Procedures for preventive maintenance.
 - f. Procedures for routine maintenance.
 - g. Instruction on use of special tools.

4. Repairs: Include the following:
 - a. Diagnosis instructions.
 - b. Repair instructions.
 - c. Disassembly; component removal, repair, and replacement; and reassembly instructions.
 - d. Instructions for identifying parts and components.
 - e. Review of spare parts needed for operation and maintenance.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Assemble educational materials necessary for instruction, including documentation and training module. Assemble training modules into a training manual organized in coordination with requirements in Section 017823 "Operation and Maintenance Data."

3.2 INSTRUCTION

- A. Facilitator: Engage a qualified facilitator to prepare instruction program and training modules, to coordinate instructors, and to coordinate between Contractor and Owner for number of participants, instruction times, and location.
- B. Engage qualified instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
 1. Architect will furnish an instructor to describe basis of system design, operational requirements, criteria, and regulatory requirements.
 2. Owner will furnish an instructor to describe Owner's operational philosophy.
 3. Owner will furnish Contractor with names and positions of participants.
- C. Scheduling: Provide instruction at mutually agreed on times. For equipment that requires seasonal operation, provide similar instruction at start of each season.
 1. Schedule training with Owner, through Architect, with at least seven days' advance notice.
- D. Training Location and Reference Material: Conduct training on-site in the completed and fully operational facility using the actual equipment in-place. Conduct training using final operation and maintenance data submittals.
- E. Evaluation: At conclusion of each training module, assess and document each participant's mastery of module by use of a demonstration performance-based test.

3.3 DEMONSTRATION AND TRAINING VIDEO RECORDINGS

- A. General: Engage a qualified commercial videographer to record demonstration and training video recordings. Record each training module separately. Include classroom instructions and demonstrations, board diagrams, and other visual aids, but not student practice.

1. At beginning of each training module, record each chart containing learning objective and lesson outline.
- B. Video Recording Format: Provide high-quality color video recordings with menu navigation in format acceptable to Architect.
- C. Preproduced Video Recordings: Provide video recordings used as a component of training modules in same format as recordings of live training.

END OF SECTION 01 79 00

SECTION 04 01 20 - MAINTENANCE OF UNIT MASONRY

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes maintenance of unit masonry consisting of brick clay masonry restoration and cleaning as follows:
 - 1. Repairing unit masonry, including replacing units.
 - 2. Repointing joints.
 - 3. Preliminary cleaning, including removing plant growth.
 - 4. Cleaning exposed unit masonry surfaces.

1.2 QUALITY ASSURANCE

- A. Restoration specialist qualifications: engage an experienced, preapproved masonry restoration and cleaning firm to perform work of this section. Firm shall have completed work similar in material, design, and extent to that indicated for this project with a record of successful in-service performance. experience installing standard unit masonry is not sufficient experience for masonry restoration work.

1.3 DEFINITIONS

- A. Low-Pressure Spray: 100 to 400 psi (690 to 2750 kPa); 4 to 6 gpm (0.25 to 0.4 L/s).

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For each exposed product and for each color and texture.

PART 2 - PRODUCTS

2.1 MASONRY MATERIALS

- A. Face Brick: Provide face brick, including specially molded, ground, cut, or sawed shapes where required to complete masonry restoration work.
 - 1. Provide units with physical properties, colors, color variation within units, surface texture, size, and shape to match existing brickwork.
 - a. For existing brickwork that exhibits a range of colors or color variation within units, provide brick that proportionally matches that range and variation rather than brick that matches an individual color within that range.
 - 2. Special Shapes:
 - a. Provide specially molded, 100 percent solid shapes for applications where core holes or "frogs" could be exposed to view or weather when in final position and

- where shapes produced by sawing would result in sawed surfaces being exposed to view.
 - b. Provide specially ground units, shaped to match patterns, for arches and where indicated.
 - c. Mechanical chopping or breaking brick, or bonding pieces of brick together by adhesive, are not acceptable procedures for fabricating special shapes.
- B. Building Brick: Provide building brick complying with ASTM C 62, Grade SW where in contact with earth, Grade SW, MW, or NW for concealed backup; and of same vertical dimension as face brick, for masonry work concealed from view.

2.2 MORTAR MATERIALS

- A. Portland Cement: ASTM C 150, Type I or Type II, white or gray or both where required for color matching of exposed mortar.
- 1. Provide cement containing not more than 0.60 percent total alkali when tested according to ASTM C 114.
- B. Hydrated Lime: ASTM C 207, Type S.
- C. Mortar Sand: ASTM C 144 unless otherwise indicated.
- 1. Color: Provide natural sand or ground marble, granite, or other sound stone of color necessary to produce required mortar color.
 - 2. For pointing mortar, provide sand with rounded edges.
 - 3. Match size, texture, and gradation of existing mortar sand as closely as possible. Blend several sands if necessary, to achieve suitable match.
- D. Mortar Pigments: Natural and synthetic iron oxides, compounded for mortar mixes. Use only pigments with a record of satisfactory performance in masonry mortars.
- E. Water: Potable.

2.3 MANUFACTURED REPAIR MATERIALS

- A. Masonry Patching Compound: Factory-mixed cementitious product that is custom manufactured for patching masonry.
- 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Cathedral Stone Products, Inc.; Jahn M100 Terra Cotta and Brick Repair Mortar.
 - b. Conproco Corporation;
 - c. Edison Coatings, Inc.; Custom System 45.
 - d. Laticrete International, Inc.
 - 2. Use formulation that is vapor- and water permeable (equal to or more than the masonry unit), exhibits low shrinkage, has lower modulus of elasticity than the masonry units being repaired, and develops high bond strength to all types of masonry.
 - 3. Formulate patching compound used for patching brick in colors and textures to match each masonry unit being patched.

2.4 CLEANING MATERIALS

- A. Water: Potable.
- B. Hot Water: Water heated to a temperature of 140 to 160 deg F (60 to 71 deg C).
- C. Job-Mixed Detergent Solution: Solution prepared by mixing 2 cups (0.5 L) of tetrasodium polyphosphate, 1/2 cup (125 mL) of laundry detergent, and 20 quarts (20 L) of hot water for every 5 gal. (20 L) of solution required.

2.5 MORTAR MIXES

- A. Measurement and Mixing: Measure cementitious materials and sand in a dry condition by volume or equivalent weight. Do not measure by shovel; use known measure. Mix materials in a clean, mechanical batch mixer.
 - 1. Mixing Pointing Mortar: Thoroughly mix cementitious materials and sand together before adding any water. Then mix again adding only enough water to produce a damp, unworkable mix that will retain its form when pressed into a ball. Maintain mortar in this dampened condition for 15 to 30 minutes. Add remaining water in small portions until mortar reaches desired consistency. Use mortar within one hour of final mixing; do not retemper or use partially hardened material.
- B. Do not use admixtures in mortar unless otherwise indicated.
- C. Mortar Proportions: Mix mortar materials in the following proportions:
 - 1. Pointing Mortar for Brick: 1 part portland cement, 2 parts lime, and 6 parts sand.
 - a. Add mortar pigments to produce mortar colors required.
 - 2. Rebuilding (Setting) Mortar: Same as pointing mortar except mortar pigments are not required.
 - 3. Rebuilding (Setting) Mortar: 1 part portland cement, 2 parts lime, and 6 parts sand.
 - 4. Rebuilding (Setting) Mortar: Comply with ASTM C 270, Proportion Specification, Type N unless otherwise indicated; with cementitious material limited to portland cement and lime.

PART 3 - EXECUTION

3.1 PROTECTION

- A. Protect persons, motor vehicles, surrounding surfaces of building being restored, building site, plants, and surrounding buildings from harm resulting from masonry restoration work.
- B. Remove gutters and downspouts and associated hardware adjacent to masonry and store during masonry repointing. Reinstall when repointing is complete.

3.2 BRICK REMOVAL AND REPLACEMENT

- A. At locations indicated, remove bricks that are damaged, spalled, or deteriorated, or are to be reused. Carefully demolish or remove entire units from joint to joint, without damaging surrounding masonry, in a manner that permits replacement with full-size units.
- B. Support and protect remaining masonry that surrounds removal area. Maintain flashing, reinforcement, lintels, and adjoining construction in an undamaged condition.
- C. Notify Architect of unforeseen detrimental conditions including voids, cracks, bulges, and loose units in existing masonry backup, rotted wood, rusted metal, and other deteriorated items.
- D. Remove in an undamaged condition as many whole bricks as possible.
 - 1. Remove mortar, loose particles, and soil from brick by cleaning with hand chisels, brushes, and water.
 - 2. Remove sealants by cutting close to brick with utility knife and cleaning with solvents.
- E. Clean bricks surrounding removal areas by removing mortar, dust, and loose particles in preparation for replacement.
- F. Replace removed damaged brick with other removed brick in good quality, where possible, or with new brick matching existing brick, including size. Do not use broken units unless they can be cut to usable size.
- G. Install replacement brick into bonding and coursing pattern of existing brick. If cutting is required, use a motor-driven saw designed to cut masonry with clean, sharp, unchipped edges.
 - 1. Maintain joint width for replacement units to match existing joints.
 - 2. Use setting buttons or shims to set units accurately spaced with uniform joints.
- H. Lay replacement brick with completely filled bed, head, and collar joints. Butter ends with sufficient mortar to fill head joints and shove into place. Wet both replacement and surrounding bricks that have ASTM C 67 initial rates of absorption (suction) of more than 30 g/30 sq. in. per min. (30 g/194 sq. cm per min.). Use wetting methods that ensure that units are nearly saturated but surface is dry when laid.
 - 1. Tool exposed mortar joints in repaired areas to match joints of surrounding existing brickwork.
 - 2. Rake out mortar used for laying brick before mortar sets and point new mortar joints in repaired area to comply with requirements for repointing existing masonry, and at same time as repointing of surrounding area.
 - 3. When mortar is sufficiently hard to support units, remove shims and other devices interfering with pointing of joints.

3.3 MASONRY UNIT PATCHING

- A. Patching Bricks:
 - 1. Remove loose material from masonry surface. Carefully remove additional material so patch will not have feathered edges but will have square or slightly undercut edges on area to be patched and will be at least 1/4 inch (6 mm) thick, but not less than recommended by patching compound manufacturer.
 - 2. Mask adjacent mortar joint or rake out for repointing if patch will extend to edge of masonry unit.
 - 3. Mix patching compound in individual batches to match each unit being patched.
 - 4. Rinse surface to be patched and leave damp, but without standing water.
 - 5. Brush-coat surfaces with slurry coat of patching compound according to manufacturer's written instructions.

6. Place patching compound in layers as recommended by patching compound manufacturer, but not less than 1/4 inch (6 mm) or more than 2 inches (50 mm) thick. Roughen surface of each layer to provide a key for next layer.
7. Trowel, scrape, or carve surface of patch to match texture and surrounding surface plane or contour of the masonry unit. Shape and finish surface before or after curing, as determined by testing, to best match existing masonry unit.
8. Keep each layer damp for 72 hours or until patching compound has set.

3.4 CLEANING MASONRY, GENERAL

- A. Proceed with cleaning in an orderly manner; work from bottom to top of each scaffold width and from one end of each elevation to the other. Ensure that dirty residues and rinse water will not wash over cleaned, dry surfaces.
- B. Use only those cleaning methods indicated for each masonry material and location.
 1. Do not use wire brushes or brushes that are not resistant to chemical cleaner being used. Do not use plastic-bristle brushes if natural-fiber brushes will resist chemical cleaner being used.
 2. Use spray equipment that provides controlled application at volume and pressure indicated, measured at spray tip. Adjust pressure and volume to ensure that cleaning methods do not damage masonry.
 - a. Equip units with pressure gages.
 3. For chemical-cleaner spray application, use low-pressure tank or chemical pump suitable for chemical cleaner indicated, equipped with cone-shaped spray tip.
 4. For water-spray application, use fan-shaped spray tip that disperses water at an angle of 25 to 50 degrees.
 5. For heated water-spray application, use equipment capable of maintaining temperature between 140 and 160 deg F (60 and 71 deg C) at flow rates indicated.
- C. Perform each cleaning method indicated in a manner that results in uniform coverage of all surfaces, including corners, moldings, and interstices, and that produces an even effect without streaking or damaging masonry surfaces.
- D. Water-Spray Application Method: Unless otherwise indicated, hold spray nozzle at least 6 inches (150 mm) from surface of masonry and apply water in horizontal back and forth sweeping motion, overlapping previous strokes to produce uniform coverage.

3.5 PRELIMINARY CLEANING

- A. Removing Plant Growth: Completely remove visible plant, moss, and shrub growth from masonry surfaces. Carefully remove plants, creepers, and vegetation by cutting at roots and allowing to dry as long as possible before removal. Remove loose soil and debris from open masonry joints to whatever depth they occur.
- B. Preliminary Cleaning: Before beginning general cleaning, remove extraneous substances that are resistant to cleaning methods being used. Extraneous substances include paint, calking, asphalt, and tar.
 1. Carefully remove heavy accumulations of material from surface of masonry with a sharp chisel. Do not scratch or chip masonry surface.
 2. Remove paint and calking with alkaline paint remover.
 - a. Comply with requirements in "Paint Removal" Article.

- b. Repeat application up to two times if needed.
- 3. Remove asphalt and tar with solvent-type paint remover.
 - a. Comply with requirements in "Paint Removal" Article.
 - b. Apply paint remover only to asphalt and tar by brush without prewetting.
 - c. Allow paint remover to remain on surface for 10 to 30 minutes.
 - d. Repeat application if needed.

3.6 CLEANING MASONRY

A. Detergent Cleaning:

- 1. Wet masonry with hot water applied by low-pressure spray.
- 2. Scrub masonry with detergent solution using medium-soft brushes until soil is thoroughly dislodged and can be removed by rinsing. Use small brushes to remove soil from mortar joints and crevices. Dip brush in solution often to ensure that adequate fresh detergent is used and that masonry surface remains wet.
- 3. Rinse with hot water applied by low pressure spray to remove detergent solution and soil.
- 4. Repeat cleaning procedure above where required to produce cleaning effect desired.

3.7 REPOINTING AND TUCK-POINTING MASONRY

A. Rake out and repoint joints to the following extent:

- 1. All joints in areas indicated.
- 2. Joints where mortar is missing or where they contain holes.
- 3. Cracked joints where cracks can be penetrated at least 1/4 inch (6 mm) by a knife blade 0.027 inch (0.7 mm) thick.
- 4. Cracked joints where cracks are 1/16 inch (1.6 mm).
- 5. Joints where they sound hollow when tapped by metal object.
- 6. Joints where they are worn back 1/4 inch (6 mm) or more from surface.
- 7. Joints where they are deteriorated to point that mortar can be easily removed by hand, without tools.
- 8. Joints where they have been filled with substances other than mortar.
- 9. Joints indicated as sealant-filled joints.

B. Do not rake out and repoint joints where not required.

C. Rake out joints as follows, according to procedures demonstrated in approved mockup:

- 1. Remove mortar from joints to depth of joint width plus 1/8 inch (3 mm), but not less than 1/2 inch (13 mm) or not less than that required to expose sound, unweathered mortar.
- 2. Remove mortar from masonry surfaces within raked-out joints to provide reveals with square backs and to expose masonry for contact with pointing mortar. Brush, vacuum, or flush joints to remove dirt and loose debris.
- 3. Do not spall edges of masonry units or widen joints. Replace or patch damaged masonry units as directed by Architect.
 - a. Cut out mortar by hand with chisel and resilient mallet. Do not use power-operated grinders.
 - b. Cut out center of mortar bed joints using angle grinders with diamond-impregnated metal blades. Remove remaining mortar by hand with chisel and resilient mallet.

- D. Notify Architect of unforeseen detrimental conditions including voids in mortar joints, cracks, loose masonry units, rotted wood, rusted metal, and other deteriorated items.
- E. Pointing with Mortar:
 - 1. Rinse joint surfaces with water to remove dust and mortar particles. Time rinsing application so, at time of pointing, joint surfaces are damp but free of standing water. If rinse water dries, dampen joint surfaces before pointing.
 - 2. Apply pointing mortar first to areas where existing mortar was removed to depths greater than surrounding areas. Apply in layers not greater than 3/8 inch (9 mm) until a uniform depth is formed. Fully compact each layer thoroughly and allow it to become thumbprint hard before applying next layer.
 - 3. After low areas have been filled to same depth as remaining joints, point all joints by placing mortar in layers not greater than 3/8 inch (9 mm). Fully compact each layer and allow to become thumbprint hard before applying next layer. Where existing masonry units have worn or rounded edges, slightly recess finished mortar surface below face of masonry to avoid widened joint faces. Take care not to spread mortar beyond joint edges onto exposed masonry surfaces or to feather edge the mortar.
 - 4. When mortar is thumbprint hard, tool joints to match original appearance of joints as demonstrated in approved mockup. Remove excess mortar from edge of joint by brushing.
 - 5. Cure mortar by maintaining in thoroughly damp condition for at least 72 consecutive hours including weekends and holidays.
 - a. Acceptable curing methods include covering with wet burlap and plastic sheeting, periodic hand misting, and periodic mist spraying using system of pipes, mist heads, and timers.
 - 6. Hairline cracking within the mortar or mortar separation at edge of a joint is unacceptable. Completely remove such mortar and repoint.
- F. Where repointing work precedes cleaning of existing masonry, allow mortar to harden at least 30 days before beginning cleaning work.

3.8 FINAL CLEANING

- A. After mortar has fully hardened, thoroughly clean exposed masonry surfaces of excess mortar and foreign matter; use wood scrapers, stiff-nylon or -fiber brushes, and clean water, spray applied at low pressure.
 - 1. Do not use metal scrapers or brushes.
 - 2. Do not use acidic or alkaline cleaners.

END OF SECTION 04 01 20

SECTION 04 01 40 - STONE REPAIR AND REPOINTING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes Maintenance of Stone consisting of Limestone and Sandstone Restoration and Cleaning as follows:
 - 1. Repairing Stone, including replacing units.
 - 2. Repointing joints with mortar.
 - 3. Preliminary cleaning, including plant growth.
 - 4. Cleaning and sealing exposed Stone surfaces.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings:
 - 1. Include plans, elevations, sections, and locations of replacement stone units on the structure and their jointing.
 - 2. Show partial replacement stone units (dutchmen).
 - 3. Show provisions for expansion joints or other sealant joints.
 - 4. Show replacement and repair anchors, including drilled-in pins.
- C. Samples: For each exposed product and for each color and texture specified.

1.3 QUALITY ASSURANCE

- A. Stone Repointing and Repair Specialist Qualifications: Engage an experienced stone repair firm to perform work of this Section. Firm shall have completed work similar in material, design, and extent to that indicated for this Project with a record of successful in-service performance. Experience in only installing standard unit masonry or new stone masonry is insufficient experience for stone repair work.
- B. Mockups: Prepare mockups of stone repair to demonstrate aesthetic effects and to set quality standards for materials and execution and for fabrication and installation.
 - 1. Stone Repair: Prepare sample areas for each type of stone indicated to have repair work performed. If not otherwise indicated, size each mockup not smaller than two adjacent whole units or approximately 48 inches in least dimension. Demonstrate quality of materials, workmanship, and blending with existing work.
 - 2. Repointing: Rake out joints in two separate areas each approximately 36 inches (900 mm) high by 48 inches (1200 mm) wide unless otherwise indicated for each type of repointing required and repoint one of the areas.

PART 2 - PRODUCTS

2.1 STONE MATERIALS

- A. Stone Matching Existing: Natural building stone of variety, color, texture, grain, veining, finish, size, and shape that match existing stone.
 - 1. For existing stone that exhibits a range of colors, texture, grain, veining, finishes, sizes, or shapes, provide stone that proportionally matches that range rather than stone that matches an individual color, texture, grain, veining, finish, size, or shape within that range.
- B. Cutting New Stone: Cut each new stone so that, when it is set in final position, the rift or natural bedding planes will match the rift orientation of existing stones.

2.2 MORTAR MATERIALS

- A. Portland Cement: ASTM C150/C150M, Type I or Type II, white or gray, or both where required for color matching of exposed mortar.
 - 1. Provide cement containing not more than 0.60 percent total alkali when tested according to ASTM C114.
- B. Hydrated Lime: ASTM C207, Type S.
- C. Mortar Cement: ASTM C1329/C1329M. Available products that may be incorporated into the work include, but are not limited to, the following:
 - 1. Master Builders Solutions
 - 2. Spec Mix
- D. Mortar Sand: ASTM C144.
 - 1. Exposed Mortar: Match size, texture, and gradation of existing mortar sand as closely as possible. Blend several sands if necessary to achieve suitable match.
 - 2. Colored Mortar: Natural sand or ground marble, granite, or other sound stone of color necessary to produce required mortar color.
- E. Mortar Pigments: ASTM C979/C979M, compounded for use in mortar mixes, and having a record of satisfactory performance in stone mortars.
 - 1. Use formulation that is vapor and water permeable (equal to or more than the stone), exhibits low shrinkage, has lower modulus of elasticity than stone units being repaired, and develops high bond strength to all types of stone.
 - 2. Formulate patching compound in colors, textures, and grain to match stone being patched.
- F. Cementitious Crack Filler: Ultrafine superplasticized grout that can be injected into cracks, is suitable for application to wet or dry cracks, exhibits low shrinkage, and develops high bond strength to all types of stone.
- G. Water: Potable.

2.3 ACCESSORY MATERIALS

- A. Setting Buttons and Shims: Resilient plastic, nonstaining to stone, sized to suit joint thicknesses and bed depths of stone units, less the required depth of pointing materials unless removed before pointing.
- B. Other Products: Select materials and methods of use based on the following, subject to approval of a mockup:
 - 1. Previous effectiveness in performing the work involved.
 - 2. Minimal possibility of damaging exposed surfaces.
 - 3. Consistency of each application.
 - 4. Uniformity of the resulting overall appearance.
 - 5. Do not use products or tools that could leave residue on surfaces.

2.4 MORTAR MIXES

- A. Measurement and Mixing: Measure cementitious materials and sand in a dry condition by volume or equivalent weight. Do not measure by shovel; use known measure. Mix materials in a clean, mechanical batch mixer.
 - 1. Mixing Pointing Mortar: Thoroughly mix cementitious materials and sand together before adding any water. Then mix again, adding only enough water to produce a damp, unworkable mix that retains its form when pressed into a ball. Maintain mortar in this dampened condition for 15 to 30 minutes. Add remaining water in small portions until mortar reaches desired consistency. Use mortar within one hour of final mixing; do not retemper or use partially hardened material.
- B. Colored Mortar: Produce mortar of color required by using specified ingredients. Do not alter specified proportions without Architect's approval.
 - 1. Mortar Pigments: Where mortar pigments are indicated, do not add pigment exceeding 10 percent by weight of the cementitious or binder materials, except for carbon black which is limited to 2 percent.
- C. Do not use admixtures in mortar unless otherwise indicated.
- D. Mixes: Mix mortar materials in the following proportions:
 - 1. Rebuilding (Setting) Mortar by Volume: ASTM C270, 1 part portland cement, 1 part lime, and 6 parts sand
 - 2. Rebuilding (Setting) Mortar by Type: ASTM C270, Proportion Specification, Type N unless otherwise indicated, with cementitious material limited to portland cement and lime or mortar cement.
 - 3. Rebuilding (Setting) Mortar by Property: ASTM C270, Property Specification, Type N unless otherwise indicated; with cementitious material limited to portland cement and lime or mortar cement.
 - 4. Pigmented, Colored Mortar: Add mortar pigments to produce exposed, setting (rebuilding) mortar of colors required.
 - 5. Pointing Mortar by Volume: ASTM C270, 1 part portland cement, 1 part lime, and 6 parts sand. Add mortar pigments to produce mortar colors required.
 - 6. Pointing Mortar by Type: ASTM C270, Proportion Specification, Type N unless otherwise indicated; with cementitious material limited to portland cement and lime, and mortar cement. Add mortar pigments to produce mortar colors required.
 - 7. Pointing Mortar by Property: ASTM C270, Property Specification, Type N unless otherwise indicated; with cementitious material limited to portland cement and lime, or mortar cement. Add mortar pigments to produce mortar colors required.

2.5 STONE SEALANT

- A. Basis of Design Product: Provide stone sealant "Hydro Seal 300" manufactured by American Building Restoration, Franklin, WI; (800)346-7532; (414)421-4125; website: www.abrp.com; or comparable products of other manufacturer approved by Architect in accordance with Instructions to Bidders and Division 01 General Requirements.

PART 3 - EXECUTION

3.1 PROTECTION

- A. Protect persons, motor vehicles, surrounding surfaces of building being restored, building site, plants, and surrounding buildings from harm resulting from stone restoration work.
- B. Remove gutters and downspouts and associated hardware adjacent to stone and store during stone repair. Reinstall when repairs are complete.
 - 1. Provide temporary rain drainage during work to direct water away from building.

3.2 STONE REMOVAL AND REPLACEMENT

- A. At locations indicated, remove stone that has deteriorated or is damaged beyond repair. Carefully remove entire units from joint to joint, without damaging surrounding stone, in a manner that permits replacement with full-size units.
- B. Support and protect remaining stonework that surrounds removal area.
- C. Maintain flashing, reinforcement, lintels, and adjoining construction in an undamaged condition.
- D. Notify Architect of unforeseen detrimental conditions including voids, cracks, bulges, and loose units in existing stone or unit masonry backup, rotted wood, rusted metal, and other deteriorated items.
- E. Remove in an undamaged condition as many whole stone units as possible.
 - 1. Remove mortar, loose particles, and soil from stone by cleaning with hand chisels, brushes, and water.
 - 2. Remove sealants by cutting close to stone with utility knife and cleaning with solvents.
- F. Clean stone surrounding removal areas by removing mortar, dust, and loose particles in preparation for stone replacement.
- G. Replace removed damaged stone, matching existing stone, including direction of rift or natural bedding planes. Do not use broken units unless they can be cut to usable size.
- H. Install replacement stone into bonding and coursing pattern of existing stone. If cutting is required, use a motor-driven saw designed to cut stone with clean, sharp, unchipped edges. Finish edges to blend with appearance of edges of existing stone.
 - 1. Maintain joint width for replacement stone to match existing joints.
 - 2. Use setting buttons or shims to set stone accurately spaced with uniform joints.
- I. Set replacement stone with rebuilding (setting) mortar and with completely filled bed, head, and collar joints. Butter vertical joints for full width before setting and set units in full bed of mortar

unless otherwise indicated. Replace existing anchors with new anchors matching existing configuration.

1. Rake out mortar used for laying stone before mortar sets according to Section 040140.62 "Stone Repointing." Point at same time as repointing of surrounding area.
2. When mortar is hard enough to support units, remove shims and other devices interfering with pointing of joints.

J. Curing: Cure mortar by maintaining in thoroughly damp condition for at least 72 consecutive hours, including weekends and holidays.

1. Hairline cracking within the mortar or mortar separation at edge of a joint is unacceptable. Completely remove such mortar and repoint.

3.3 STONE PLUG REPAIR

- A. Remove cylindrical piece of damaged stone by core-drilling perpendicular to stone surface.
- B. Prepare a replacement plug by core-drilling replacement stone. Use a drill sized to produce a core that will fit into hole drilled in damaged stone with only minimum gap necessary for adhesive.
- C. Apply stone-to-stone adhesive according to adhesive manufacturer's written instructions. Coat bonding surfaces of existing stone and plug, completely filling all crevices and voids.
- D. Apply plug while adhesive is still tacky and hold securely in place until adhesive has cured.
- E. Clean adhesive residue from exposed surfaces.

3.4 STONE-FRAGMENT REPAIR

- A. Carefully remove cracked or fallen stone fragment indicated to be repaired. Reuse only stone fragment that is in sound condition.
- B. Remove soil, loose particles, mortar, and other debris or foreign material from fragment surfaces to be bonded and from parent stone where fragment had broken off, by cleaning with stiff-fiber brush.
- C. Concealed Pinning: Before applying adhesive, prepare for concealed mechanical anchorage consisting of 1/4-inch- (6-mm-) diameter, threaded stainless-steel pins set into 1/4-inch- (6-mm-) diameter holes drilled into parent stone and into, but not through, the fragment.
- D. Apply stone-to-stone adhesive according to adhesive manufacturer's written instructions. Coat bonding surfaces of fragment and parent stone, completely filling all crevices and voids.
- E. Fit stone fragment onto parent stone while adhesive is still tacky and hold fragment securely in place until adhesive has cured. Use shims, clamps, wedges, or other devices as necessary to align face of fragment with face of parent stone.

3.5 CRACK INJECTION

- A. General: Comply with cementitious crack-filler manufacturer's written instructions.
- B. Drill 1/4-inch- (6-mm-) diameter injection holes as follows:

1. Transverse Cracks Less Than 3/8 inch (9 mm) Wide: Drill holes through center of crack at 12 to 18 inches (300 to 500 mm) o.c.
 2. Transverse Cracks More Than 3/8 inch (9 mm) Wide: Drill holes through center of crack at 18 to 36 inches (500 to 900 mm) o.c.
 3. Delaminations: Drill holes at approximately 18 inches (500 mm) o.c. both vertically and horizontally.
 4. Drill holes 2 inches (50 mm) deep.
- C. Clean out drill holes and cracks with compressed air and water. Remove dirt and organic matter, loose material, sealants, and failed crack repair materials.
- D. Place plastic injection ports in drilled holes and seal face of cracks between injection ports with clay or other nonstaining, removable plugging material. Leave openings at upper ends of cracks for air release.
- E. Inject cementitious crack filler through ports sequentially, beginning at one end of area and working to opposite end; where possible, begin at lower end of injection area and work upward. Inject filler until it extrudes from adjacent ports. After port has been injected, plug with clay or other suitable material and begin injecting filler at adjacent port, repeating process until all ports have been injected.
- F. Clean cementitious crack filler from face of stone before it sets by scrubbing with water.
- G. After cementitious crack filler has set, remove injection ports, plugging material, and excess filler. Patch injection holes and surface of cracks as specified in "Stone Patching" Article.

3.6 STONE PATCHING

- A. General
1. Remove deteriorated material and remove adjacent material that has begun to deteriorate. Carefully remove additional material so patch does not have feathered edges but has square or slightly undercut edges on area to be patched and is at least 1/4 inch (6 mm) thick, but not less than recommended in writing by patching compound manufacturer.
 2. Mask adjacent mortar joint or rake out for repointing if patch will extend to edge of stone unit.
 3. Mix patching compound in individual batches to match each stone unit being patched. Combine one or more colors of patching compound, as needed, to produce exact match.
 4. Brush-coat stone surfaces with slurry coat of patching compound according to manufacturer's written instructions.
 5. Place patching compound in layers as recommended in writing by patching compound manufacturer, but not less than 1/4 inch (6 mm) or more than 2 inches (50 mm) thick. Roughen surface of each layer to provide a key for next layer.
 6. Simple Details: Trowel, scrape, or carve surface of patch to match texture and surrounding surface plane or contour of the stone. Shape and finish surface before or after curing, as determined by testing, to best match existing stone.
 7. Carved Details: Build patch up 1/4 inch (6 mm) above surrounding stone and carve surface to match adjoining stone after patching compound has hardened.
 8. Keep each layer damp for 72 hours or until patching compound has set.
 9. Remove and replace patches with hairline cracks or that show separation from stone at edges, and those that do not match adjoining stone in color or texture.
- B. Patching for breaks less than 3/4-inch in depth:

1. Patching is a process where the chipped or broken out areas of stone are repaired by patching the void with an epoxy mortar mix. This method is to be used where the broken off pieces of stone are either not available and/or the size of the chipped area is under 3/4 inch in depth. The subject area is to be examined to determine if the size of the break warrants, or can accommodate, "tie-in" dowel pins.
 - a. If the condition to be patched is of a size where steel dowel pins cannot be properly encapsulated with the patch mix, provide an alternative "tie-in" by drilling several 3/16-inch diameter "key-in" holes, using diamond bits, at alternate approach angles ($\pm 1\frac{1}{2}$ -inch o.c., $\pm 3/8$ -inch deep). This will provide a mechanical tie-in that is in addition to the adhesion obtained by the mortar mix.
 - b. At conditions where the size of the patch can properly encapsulate steel dowel pins, prepare the area by drilling 3/16-inch diameter holes, using diamond core bits, at alternating approach angles. Fill the holes with epoxy mortar mix and insert 1/8-inch diameter stainless steel dowel pins, allowing the dowel pins to project out into the area to be filled.
 - c. The area to be patched is to be clean, free of dust and dry. The subject area should be kept free from exposure to moisture for a minimum of 24 hours prior to the repair operation. As an added precaution, the subject area may be further dried by the use of a hot air blow dryer for a minimum of 5 minutes prior to proceeding with the patching.
 - d. Prepare an "epoxy mortar mix" consisting of an approved bonding agent, and ground stone particles, to a non-sag consistency; fully fill "key-in" holes and then fill in the balance of the chipped or broken area. Texture the surface of this patch to resemble the adjacent finish. Once the epoxy has fully set, rough up or hone the surface to match the flamed or honed finish to produce a matching texture.
- C. Filling & patching for breaks larger than 3/4-inch in depth:
 1. Where the chipped or broken out area is larger than 3/4-inch in depth and the broken off piece of stone is not available, the area must be prepared by filling in or building up the void area with a material especially manufactured and formulated for this particular application. Then, the final surface area is to be patched and dressed using an "epoxy mortar mix" as previously described.
 - a. Prepare the area to be filled by providing a mechanical tie-in by installing 1/8-inch diameter bent dowel pins at alternating approach angles in the base stone
 - b. Place and secure edge plywood framing as required.
 - c. Clean and dry the area.
 - d. Prepare a "fill mixture" of an approved bonding agent (without any aggregate) and fill the void area completely except the top, $\pm 1/2$ -inch. Allow some of the dowel pins to penetrate out into this 1/2-inch area.
 - e. Allow the "fill mix" to cure for a minimum of 24-hours. Then patch the remaining area using an approved bonding agent.
- D. Bonding:
 1. Bonding shall be done when an actual piece of the broken stone is available to be reattached and bonded back into place.
 - a. The broken off piece is to be placed, and temporarily held, in proper position on the unit, and several 3/16-inch diameter holes are to be drilled through the broken off piece directly into the main base piece. The holes should be located in the "meaty" portion of the broken off stone. The depth penetration of these holes into the base piece is to be $\pm 3/4$ -inch.
 - b. After drilling the holes, both pieces of stone are to be cleaned and thoroughly dried using a hot air blow dryer.
 - c. Prepare an "adhesive mix" of an approved bonding agent without any aggregate. Fill all the pre-drilled "key-in" holes with the adhesive mix, as well as both surfaces of the stone that will come in contact with one another. Press fit the pieces to be bonded together and insert stainless steel dowel pins so that the pin engagement

is approximately 50% in each of the two pieces of stone. The exposed access holes are to be patched using an approved epoxy mortar mix with the appropriate color granulated aggregate to match the adjacent area. Clean off any excess overflow and attach retaining clamps if necessary.

E. Pinning:

1. Broken or loose stone can be pinned, if determined to be repairable by an expert.
 - a. To pin a vertically installed stone facing, drill a half inch diameter hole sloping down approximately 22 degrees, through the stone and its setting space into the concrete backup structure.
 - b. Clean the hole with air and inject low consistency epoxy in the hole in the stone.
 - c. Dip pre-cut stainless steel rod in epoxy and place it in the hole of the concrete and the stone approximately 1/4-inch short of the finished face of the stone.
 - d. Fill the last 1/4-inch with epoxy and stone powder.

F. Materials and tools

1. Patching: use an "epoxy mortar mix" consisting of an approved bonding agent with fine to medium aggregate consisting of ground particles of the actual project stone for the purpose of obtaining and matching the original project stone.
2. Filling and patching: "fill mix" to be an approved bonding agent with no aggregate added.
3. Bonding: adhesive mix is to be made of an approved bonding agent.
4. Stone aggregate: pre-packaged, dry, stone aggregate of the project stone, of a color to produce a mortar mix that matches the project stone.
5. Factory pre-packaged proportional units of an approved bonding agent with the appropriate mixing containers.
6. Stainless steel type 302 or 304 solid dowel pins or threaded rods of various lengths - straight or bent.

G. Other equipment: diamond drill bits, hot air dryer, clamps, spatulas, polyethylene, tapes.

3.7 REPOINTING

A. Rake out and repoint joints to the following extent:

1. All joints in areas indicated.
2. Deteriorated existing joints as sealant-filled joints. Seal joints according to "Joint Sealants," see item F below.
3. Joints at locations of the following defects:
 - a. Holes and missing mortar.
 - b. Cracks that can be penetrated 1/4 inch (6 mm) or more by a knife blade 0.027 inch (0.7 mm) thick.
 - c. Cracks 1/8 inch (3 mm) or more in width and of any depth.
 - d. Hollow-sounding joints when tapped by metal object.
 - e. Eroded surfaces 1/4 inch (6 mm) or more deep.
 - f. Deterioration to point that mortar can be easily removed by hand, without tools.
 - g. Joints filled with substances other than mortar.

B. Do not rake out and repoint joints where not required.

C. Rake out joints as follows, according to procedures demonstrated in approved mockup:

1. Remove mortar from joints to depth of joint width plus 1/8 inch (3 mm) and not less than that required to expose sound, unweathered mortar. Do not remove unsound mortar more than 2 inches (50 mm) deep; consult Architect for direction.
2. Remove mortar from stone surfaces within raked-out joints to provide reveals with square backs and to expose stone for contact with pointing mortar. Brush, vacuum, or flush joints to remove dirt and loose debris.

3. Do not spall edges of stone units or widen joints. Replace or patch damaged stone units as directed by Architect.
- D. Notify Architect of unforeseen detrimental conditions including voids in mortar joints, cracks, loose stone, rotted wood, rusted metal, and other deteriorated items.
- E. Pointing with Mortar:
 1. Rinse joint surfaces with water to remove dust and mortar particles. Time rinsing application so, at time of pointing, joint surfaces are damp but free of standing water. If rinse water dries, dampen joint surfaces before pointing.
 2. Apply pointing mortar first to areas where existing mortar was removed to depths greater than surrounding areas. Apply in layers not greater than 3/8 inch (9 mm) until a uniform depth is formed. Fully compact each layer and allow it to become thumbprint hard before applying next layer.
 3. After deep areas have been filled to same depth as remaining joints, point joints by placing mortar in layers not greater than 3/8 inch (9 mm). Fully compact each layer and allow to become thumbprint hard before applying next layer. Where existing stone has worn or rounded edges, slightly recess finished mortar surface below face of stone to avoid widened joint faces. Take care not to spread mortar beyond joint edges onto exposed stone surfaces or to featheredge the mortar.
 4. When mortar is thumbprint hard, tool joints to match original appearance of joints as demonstrated in approved mockup. Remove excess mortar from edge of joint by brushing.
 5. Cure mortar by maintaining in thoroughly damp condition for at least 72 consecutive hours, including weekends and holidays.
 6. Hairline cracking within mortar or mortar separation at edge of a joint is unacceptable. Completely remove such mortar and repoint.
- F. Joint Sealants:
 1. All joint sealants shall be rated for exterior use, be compatible with masonry and stone, and meet the low-VOC requirements of SCAQMD Rule 1168.
 2. Basis-of-Design Product: Provide joint sealant products manufactured by Dow Corning Corporation, Midland MI; (877) SEALANT, (877) 732-5268; email: construction@dowcorning.com; website: www.dowcorning.com/construction, or Comparable products of other manufacturer approved by Architect.
- G. Where repointing work precedes cleaning of existing stone, allow mortar to harden at least 30 days before beginning cleaning work.

3.8 FINAL CLEANING AND SEALING

- A. After mortar has fully hardened, thoroughly clean exposed stone surfaces of excess mortar and foreign matter; use wood scrapers, stiff-nylon or -fiber brushes, and clean water, applied by low-pressure spray.
 1. Do not use metal scrapers or brushes.
 2. Do not use acidic or alkaline cleaners.
- B. Seal all exposed sides of stone throughout the building.

END OF SECTION 04 01 40