

REQUEST FOR BIDS

EASTRIDGE HOUSE FIRE MONITORING SYSTEM UPGRADE

120 WEST SUNSET WAY
ISSAQUAH, WA 98027

RELEASED BY:



CAPITAL CONSTRUCTION DEPARTMENT
700 ANDOVER PARK WEST, SUITE C
TUKWILA, WA 98188

BID DATES

ISSUANCE DATE: APRIL 26, 2023

DUE DATE: MAY 17, 2023

TIME: 1:00PM



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INVITATION FOR BID

DUE DATE: MAY 17, 2023

The King County Housing Authority (KCHA) will accept bids from qualified general contractors to furnish labor, materials and necessary equipment to perform the following:

SCOPE OF WORK: EASTRIDGE HOUSE FIRE MONITORING SYSTEM UPGRADE

Eastridge House is a three (3) story building that was constructed in 1971 and consists of thirty-nine (39) one (1) bedroom apartments and one (1) two (2) bedroom; all units have one (1) bathroom. The building is of wood construction with gypsum interior walls/ceilings (common corridors have a grid drop ceiling), and a masonry exterior veneer. Contractor to verify conditions. The building has one (1) elevator, one (1) main lobby, two (2) offices, one (1) garbage room, one (1) maintenance room, one (1) laundry room, one (1) elevator equipment room, one (1) electrical equipment room, two (2) three-story stairwells, one (1) community room, one (1) storage room, one (1) common kitchen, one (1) men and (1) women's restroom, and a common corridor all floors. The second and third floors contain one (1) elevator lobby and tenant units. In addition, the building houses three (3) ADA type units, all located on the first floor (ADA units 110, 112, and 113). The majority of the population consists of the elderly and disabled. KCHA has had hazardous materials testing completed in 2013. Reports supplied in bid documents.

The Eastridge House Fire Monitoring System Upgrade is design-build in nature and shall be all-inclusive for a complete turnkey system that meets all standards, KCHA specifications and plans, applicable codes, and permit requirements. KCHA has added elements to the system that may exceed jurisdictional standards. To ensure all KCHA project details are included in the Contractor's design, the Contractor will need to submit shop drawings of the new fire monitoring system to KCHA for approval before being submitted for review by the Fire Marshall. In the bid documents, KCHA has provided a site assessment of existing fire monitoring system with upgrade recommendations, and a system code analysis for new system requirements. It is up to the Contractor to design a system using the recommendations provided.

All new wiring must be concealed behind Gypsum Wall Board (GWB) or in KCHA-approved line covers. There may be variations in the layout from the plan depictions, and it is the Contractor's responsibility to verify actual conditions. The Contractor is to carry a contingency in their bid proposal accounting for variations and will be responsible for all wiring, device installation, routing, connections, testing, and restoration of the interior and exterior elements affected by the work. Existing fire alarms in tenant units will be removed and the electrical boxes covered with a blank plates. The existing fire alarms in the common hallways will be removed along with the electrical box and the drywall hole patched and painted. The wall will be painted corner to corner, top to bottom. The Contractor will keep the existing active alarm system running until the new fire monitoring system is activated and passed inspections. The duration of this project is ninety (90) calendar days from Notice to Proceed.

The Contractor must take all precautions to provide a safe work site for the residents, staff, and workers. The Contractor is to provide two-week look-ahead schedules throughout the project so that KCHA staff can notify residents of unit entries 48 hours in advance. The Contractor is responsible for protecting both tenant/KCHA physical assets and is required to mitigate dust and debris using tarps, zip walls, HEPA vacuums, etc. The Contractor to provide the Owner a turnkey fire monitoring system and include all design, reviews, permits, testing, materials, labor, and equipment in bid.

[For complete scope, please see E.1 Scope of Work and Technical Specifications](#)

DRAWINGS – PROJECT MANUAL DISTRIBUTION:

Drawing and bid documents can be downloaded from:

<https://www.kcha.org/business/construction/open>



**KCHA – EASTRIDGE HOUSE FIRE MONITORING SYSTEM UPGRADE
CAPITAL CONSTRUCTION DEPARTMENT**

PRE-BID CONFERENCE:

Date: **May 3, 2023**
Time: **11:00 AM**
Jobsite Address: **120 West Sunset Way, Issaquah, WA 98027**
Notation: Attendance of the Pre-Bid Site Visit is **MANDATORY**.
Questions / Direct Questions, Requests or Clarification by Email or Fax to:
Contact Person: Project Manager: Don Hatfield
Email Address: donaldh@kcha.org
Phone Number: 206-574-1213
No Later Than: May 10, 2023
Website Posting: <https://www.kcha.org/business/construction/open>

All responses shall be in the form of Addenda
All Addenda(s) will post As Occurs
Plan Holder’s List posts every Friday

BIDS ARE DUE:

Date: **May 17, 2023**
Time: **1:00 pm**
Address: King County Housing Authority
600 Andover Park West, Tukwila, WA 98188

Submittal Procedure: **Envelope MUST BE:**

- a. Sealed
- b. List Name and Address of your Firm/Company
- c. List Due Date and Time
- d. List Project Name:
EASTRIDGE HOUSE FIRE MONITORING SYSTEM UPGRADE
- e. Mailing / Shipping Package or Wrapping **must also be marked** with this information.

KCHA Process: **All Bids MUST BE Time and Date Stamped at King County Housing Authority’s Central Campus by the above Due Date and Time.**

- a. No Bids will be accepted after that Date and Time.
- b. No Bids Faxed or Emailed will be accepted.
- c. Bids should be dropped off at the front desk at **600 Andover Park West, Tukwila, WA 98188.**
- d. Bids will be accepted between **NOON – 1:00PM ONLY.**
- e. A KCHA representative will be present at the front desk to time stamp bids.
- f. At 1:00PM bidding will be closed and no further bids will be accepted.
- g. Bids received on or before 1:00 PM will be opened and read in the presence of one or more witnesses which includes KCHA staff (project manager, project specialist and a department manager).
- h. Bids will be tabulated and bidders notified by email of the bid results.

****NOTE:** Contractors have the option to mail in bids, but bids must be received by the deadline of 1:00PM. KCHA does not recommend mailing in bids due to possible complications or difficulties that may arise with the mail delivery.

BID BOND OR CERTIFIED CHECK:

Amount: **Five (5%) Percent** of the Total bid must accompany Each Bid **greater than one hundred fifty (\$150,000) dollars.**

Payable to: King County Housing Authority



**KCHA – EASTRIDGE HOUSE FIRE MONITORING SYSTEM UPGRADE
CAPITAL CONSTRUCTION DEPARTMENT**

Process: Bid Bond or Certified Check will be returned to the Unsuccessful Bidders within **Ten (10) Days** after the Contract Award.

BONDS MUST BE ORIGINAL, NO PHOTOCOPIES OR SCANNED BONDS WILL BE ALLOWED

COVID-19 REQUIRED COMPLIANCE

Contractor’s employees and all sub-contractors’ employees will be required to wear a mask if they are in a building or a resident’s unit. Contractor shall report to KCHA any COVID positive or exposed employees so KCHA can determine if any follow-up is required. All sub-contractors are to report any COVID positive or exposed employees to the Contractor.

ASSURANCE OF COMPLETION:

Projects valued over one hundred fifty thousand (\$150,000) dollars **require** a one hundred (100%) percent Performance and Payment Bond. (See Section C – Contract Documents)

BONDING CAPACITY:

Provide **with your bid proposal**, a written statement from the contractor’s bonding agent of the contractor’s ability and capacity for providing a one hundred (100%) percent Performance and Payment Bond for the project. The statement shall be made on the official letterhead of the bonding company and signed by an authorized agent of the bonding company.

BONDING & INSURANCE FOR CONTRACT AWARD:

The contract award will be contingent on full performance bonding, or equivalent and contractor’s ability to meet KCHA insurance requirements as outlined in the bid documents.

HUD NON-ROUTINE MAINTENANCE WAGE RATES:

Bidders should note that the current prevailing HUD Non-Routine Maintenance wage rates and weekly payroll reporting requirements apply to this project.

WASHINGTON STATE REQUIREMENT:

All contractors and subcontractors working on this project are required to file a “Statement of Intent to Pay Prevailing Wages”, “Affidavit of Wages Paid” and certified payroll with L&I. (See Form **A.12** for additional information.)

EEOE:

The King County Housing Authority is an Equal Employment Opportunity Employer and strongly encourages minority-owned and women-owned businesses, socially and economically disadvantaged businesses, and small businesses to submit bids or to participate as subcontractors and suppliers on KCHA Contracts.

KCHA RESERVED RIGHTS:

The King County Housing Authority reserves the right to reject any or all bids or to waive any informality in the bidding. No bid shall be withdrawn for a period of thirty (30) calendar days subsequent to the opening of the bids without the written consent of KCHA.

The King County Housing Authority also reserves the right to reject all bids, for any reason, prior to Contract Execution.

PUBLIC RECORDS:

All information submitted to KCHA will become public records, as per RCW 42.56. If you are submitting information, which you think is confidential and/or proprietary to your business, KCHA recommends that you do not submit that information, as KCHA cannot guarantee that type of information will be withheld from a public disclosure request.



**KCHA – EASTRIDGE HOUSE FIRE MONITORING SYSTEM UPGRADE
CAPITAL CONSTRUCTION DEPARTMENT**

PLAN CENTERS:

Bid documents, including drawings, specifications and conditions of the agreements may be examined at the following offices:

BUILDERS EXCHANGE OF WA
2607 Wetmore Ave.
Everett, WA 98201
www.bxwa.com
425-258-1303

CONTRACTOR PLAN CENTER
5468 SE International Way
Milwaukie, OR 97222
www.contractorplancenter.com
503-650-0148

DAILY JOURNAL OF COMMERCE
www.djc.com
206-622-8272

**DODGE CONSTRUCTION
NETWORK**
www.construction.com
877-784-9556

ISQFT
www.isqft.com
800-364-2059 x7051

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PUBLICATION: Daily Journal of Commerce Daily
The Seattle Medium Wednesday
Northwest Asian Weekly Thursday
KCHA Web Site www.kcha.org/business/construction/open

CONTACT PERSON:

Don Hatfield Project Manager
206-574-1213 Phone Number
Donaldh@kcha.org Email Address



EXAMPLE OF SEALED ENVELOPE PROCEDURE / PREPARATION:

FROM:	
ENTER YOUR COMPANY NAME	
Street Address	
City, State, Zip Code	
TO:	
KING COUNTY HOUSING AUTHORITY	
CAPITAL CONSTRUCTION DEPARTMENT	
700 Andover Park West, Suite C	
Tukwila, WA 98188	
BID DUE:	
Date: May 17, 2023	
Time: 1:00 PM	
PROJECT NAME:	EASTRIDGE HOUSE FIRE MONITORING SYSTEM UPGRADE

**Upon Receipt, the Envelope will be Time and Date Stamped by
King County Housing Authority**

NOTICE TO ALL BIDDERS

In order to be considered as **RESPONSIVE BIDS**, all bidders **MUST** submit Signed Section B forms no later than the **Bid Due Date and Time**:

- B.1 Bid Form**
- B.2 Bidder's Experience Record**
- B.3 Contractor Certification**
- B.4 Non-Collusive Affidavit**
- B.5 Equal Opportunity**
- B.6 Bid Security (Submit only for bids greater than \$150,000)**
- B.7 Debarment / Suspension Compliance Certification**
- B.8 Proposed Subcontractor List**
- B.9 Section 3**
 - a. Business Certification**
 - b. Subcontractor Work Plan**
- B.10 Harassment and Discrimination Policies**
- B.11 WMBE Survey (Form is not required to be responsive, but requested)**
- B.12 Preliminary Project Schedule – Provided by Contractor**

FORM 5369

From HUD Website 2021

**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

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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." **NO LONGER REQUIRED BY HUD**~~

(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
Capital Construction Department
King County Housing Authority
600 Andover Park West
Tukwila, WA 98188**

[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)~~

KCHA Procurement Policy requires Bid Guarantees for Projects valued at \$150,000 or more.

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.

Treasury website: <https://www.fiscal.treasury.gov/surety-bonds/>

(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.~~

FAIR HOUSING/ACCESSIBILITY NOTICE

A. SUBJECT:

Accessibility Notice: Section 504 of the Rehabilitation Act of 1973; the Americans with Disabilities Act of 1990; the Architectural Barriers Act of 1968 and the Fair Housing Act of 1988.

B. PURPOSE:

The purpose of this Notice is to remind recipients of Federal funds (in this instance, the Public Housing Authority) of their obligation to comply with pertinent laws and implementing regulations which provide for non-discrimination and accessibility in Federally funded housing and non-housing programs for people with disabilities.

C. NOTIFICATIONS:

Public housing agencies (PHAs) and other recipients of Federal PIH funds are responsible for providing this Notice to all current and future contractors participating in covered programs / activities or performing work covered under the above subject legislation and implementing regulations.

D. TO READ THE FULL TEXT OF THE NOTICE:

Go to www.kcha.org/business/requirements

Scroll down to Fair Housing Laws and Read: **Fair Housing / Accessibility Notice**



PRE-BID CONFERENCE

There will be a Pre-Bid Conference prior to the date of the bid opening for the purpose of providing a general discussion and review of any questions that might pertain to the bidding documents and procedures. All interested contractors are required to attend this meeting after reading the Project Manual. Please bring Project Manual and drawings, if any, to this conference. Project Manuals will be available for purchase at the Pre-Bid Conference. ATTENDANCE OF THE PRE-BID CONFERENCE IS REQUIRED FOR ACCEPTANCE OF BID FROM THE CONTRACTOR.

PROJECT SITE ADDRESS: **Eastridge House**
120 West Sunset Way
Issaquah, WA 98027

CONFERENCE DATE: **May 3, 2023**

TIME: **11:00 AM**

CONTACT NAME: **Don Hatfield**

EMAIL: **donaldh@kcha.org**

PROJECT WAGE RATES

A. DAVIS BACON WAGE RATES (NA)

B. HUD NON-ROUTINE MAINTENANCE WAGES

TYPE OF WAGE RATES: HUD NON-ROUTINE MAINTENANCE

WAGE DATE: 02/01/23

For contracts entered into pursuant to competitive bidding procedures, the bid opening date “locks-in” the Non-Routine Maintenance Wage Rates that will be used during the course of the project.

NOTE: The awarded bidder will be required to submit, along with other contractual documentation, Form C.9 Certification of Compliance with Washington State Wage Payment Statutes.

Maintenance Wage Rate Determination	U.S. Department of Housing and Urban Development Office of Labor Relations	
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Agency Name: King County Housing Authority 600 Andover Park W. Tukwila, WA 98188 (Sedro Woolley, King County HA)	LR 2000 Agency ID No: WA23-ALL Effective Date: February 1, 2023	Wage Decision Type: <input type="checkbox"/> Routine Maintenance <input checked="" type="checkbox"/> Nonroutine Maintenance Expiration Date: December 31, 2025
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The following wage rate determination is made pursuant to Section 12(a) of the U.S. Housing Act of 1937, as amended, (public housing agencies), or pursuant to Section 104(b) of the Native American Housing Assistance and Self-determination Act of 1996, as amended, (Indian housing agencies). The agency and its contractors may pay to maintenance laborers and mechanics no less than the wage rate(s) indicated for the type of work they actually perform.

Melanie Hertel	revised 1.23.2023
HUD Labor Relations (Name, Title, Signature)	Date

WORK CLASSIFICATION(S)	HOURLY WAGE RATES	
	BASIC WAGE	FRINGE BENEFIT(S) (if any)
Asphalt Painter	\$23.57	\$6.30
Asphalt Raker	\$23.57	\$6.30
Asphalt Roller/Cement Mixer over 16yds.	\$32.24	\$10.49
Backhoe Operator	\$30.52	\$8.85
Carpenter	\$32.24	\$10.49
Cement Mason - Finisher	\$32.24	\$10.49
Concrete Saw Operator	\$30.52	\$8.85
Drywall	\$30.52	\$8.85
Electrician	\$32.24	\$10.49
Elevator Mechanic	\$56.22	\$39.76
Fence Erector	\$23.57	\$6.30
Glazier	\$30.52	\$8.85
HVAC/Furnace Mechanic	\$32.24	\$10.49
Ironworker	\$46.76	\$31.00
Laborer	\$30.10	\$8.27
Low Voltage Technician	\$32.24	\$10.49
Motor Grader	\$30.52	\$8.85
Nozzleman for Cement Mixer	\$30.52	\$8.85

The agency employee benefit program has been determined by HUD to be acceptable for meeting the prevailing fringe benefit requirements.
(HUD Labor Relations: If applicable, check box and initial below.)

 LR Staff Initial

	FOR HUD USE ONLY LR2000: Log in: Log Out:
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Maintenance Wage Rate Determination	U.S. Department of Housing and Urban Development Office of Labor Relations	
Agency Name: King County Housing Authority 600 Andover Park W. Tukwila, WA 98188 (Sedro Woolley, King County HA)	LR 2000 Agency ID No: WA23-ALL	Wage Decision Type: <input type="checkbox"/> Routine Maintenance <input checked="" type="checkbox"/> Nonroutine Maintenance
	Effective Date: February 1, 2023	Expiration Date: December 31, 2025
<p>The following wage rate determination is made pursuant to Section 12(a) of the U.S. Housing Act of 1937, as amended, (public housing agencies), or pursuant to Section 104(b) of the Native American Housing Assistance and Self-determination Act of 1996, as amended, (Indian housing agencies). The agency and its contractors may pay to maintenance laborers and mechanics no less than the wage rate(s) indicated for the type of work they actually perform.</p>		
/s/ Melanie Hertel		Revised 1.23.2023
HUD Labor Relations (Name, Title, Signature)		Date
WORK CLASSIFICATION(S)	HOURLY WAGE RATES	
	BASIC WAGE	FRINGE BENEFIT(S) (if any)
Painter	\$30.52	\$8.85
Paver/Roller/(Sakai Roller)	\$32.24	\$10.49
Paving Machine Operator – Self Propelled	\$30.52	\$8.85
Pipefitter	\$23.57	\$6.30
Pipe Reliner	\$32.24	\$10.49
Plumber	\$32.24	\$10.49
Pressure Washer	\$23.57	\$6.30
Refrigeration Mechanic	\$32.24	\$10.49
Roofer	\$30.52	\$8.85
Roto-mill/Roto-grinder Operator	\$30.52	\$8.85
Screedman	\$30.52	\$8.85
Sheet Metal Worker	\$32.24	\$10.49
Soft Floor Layer	\$30.52	\$8.85
Tree Trimmer/Tree Climber	\$23.57	\$6.30
Truck Driver – All Yardage	\$30.52	\$8.85
Welder	\$56.68	\$28.02
		<input type="checkbox"/> The agency employee benefit program has been determined by HUD to be acceptable for meeting the prevailing fringe benefit requirements. <small>(HUD Labor Relations: If applicable, check box and initial below.)</small> _____ LR Staff Initial
		FOR HUD USE ONLY LR2000: Log in: Log Out:

TAX APPLICATIONS

TAX APPLICATIONS

If you have questions regarding the application of the retail sales tax exemption to the King County Housing Authority, please call your personal tax advisor or the Washington State Department of Revenue Office toll-free for one-on-one help: Telephone Information Center 1-800-647-7706.

WAC 458-20-17001

Government contracting -- Construction, installations, or improvements to government real property.

(1) Special business and occupation tax applications and special sales/use tax applications pertain for prime and subcontractors who perform certain construction, installation, and improvements to real property of or for the United States, its instrumentalities, or a county or city housing authority created pursuant to chapter 35.82 RCW. These specific construction activities are excluded from the definition of "sale at retail" under RCW 82.04.050. All other sales to the United States, its agencies or instrumentalities are taxable as retail sales or wholesale sales, as appropriate. See WAC 458-20-190.

(2) The definitions of terms and general provisions contained in WAC 458-20-170 apply equally for this rule, as appropriate. In addition, the terms, "clearing land" and "moving earth" include well drilling, core drilling, and hole digging, whether or not casing materials are installed and any grading or clearing of land, including the razing of buildings or other structures.

Business and Occupation Tax

(3) Amounts derived from constructing, repairing, decorating, or improving new or existing buildings or other structures, including installing or attaching tangible personal property therein or thereto, and clearing land or moving earth, of or for the United States, its instrumentalities, or county or city housing authorities of chapter 35.82 RCW are taxable under the government contracting classification of business and occupation tax. The measure of the tax is the gross contract price.

(4) Government contractors who manufacture or produce any tangible personal property for their own commercial or industrial use as consumers in performing government contracting activities are subject to the manufacturing classification of business and occupation tax measured by the value of the property manufactured or produced. See also, WAC 458-20-134. The manufacturing tax applies even though the property manufactured or produced for commercial use may be subsequently incorporated into buildings or other structures under the government contract and may thereby enhance the gross contract price.

Retail Sales Tax

(5) The retail sales tax does not apply to the gross contract price, or any part thereof, for any business activities taxable under the government contracting classification. Prime and subcontractors who perform such activities are themselves included within the statutory definition of "consumer" under RCW 82.04.190 and are required to pay retail sales tax upon all purchases of materials, including prefabricated and precast items, equipment, and other tangible personal property which is installed, applied, attached, or otherwise incorporated in their government contracting work. This applies for all such purchases of tangible personal property for installation, etc., even though the full purchase price of such property will be reimbursed by the government or housing authority in the gross contract price. It also applies notwithstanding that the contract may contain an immediate title vesting clause which provides that the title to the property vests in the government or housing authority immediately upon its acquisition by the contractor.



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(6) Also, the retail sales tax must be paid by government contractors upon their purchases and leases or rentals of tools, consumables, and other tangible personal property used by them as consumers in performing government contracting.

Use Tax

(7) The use tax applies upon the value of all materials, equipment, and other tangible personal property purchased at retail, acquired as a bailee or donee, or manufactured or produced by the contractor for commercial or industrial use in performing government contracting and upon which no retail sales tax has been paid by the contractor, its bailor or donor.

(8) Thus the use tax applies to all property provided by the federal government to the contractor for installation or inclusion in the contract work as well as to all government provided tooling.

(9) The use tax is to be reported and paid by the government contractor who actually installs or applies the property to the contract. Where the actual installing contractor pays the tax, no further use tax is due upon such property by any other contractor.

(10) Note to contractors: The United States Supreme Court has sustained the government contracting tax applications for this state, even though the ultimate economic burden of the tax is borne by the United States Government (Washington v. US, 75 L.Ed 2d 264, 1983).

(11) This rule does not apply to public road construction. See WAC 458-20-171.
[Statutory Authority: RCW 82.32.300. 86-10-016 (Order ET 86-9), § 458-20-17001, filed 5/1/86.]

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) as implemented by HUD under 24 CFR Part 75 (collectively, the “Section 3 Regulations”). 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, including persons who are recipients of HUD assistance for housing, with preference for both targeted workers living in the service area or neighborhood of the Development and YouthBuild participants.
- B. The parties to this contract agree to comply with Section 3 Regulations. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual obligation or other impediment that would prevent them from complying with Section 3 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 Section 3 Regulations, 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 Section 3 Regulations. The Contractor will not subcontract with any subcontractor where the Contractor has notice or knowledge that the subcontractor has been found in violation of Section 3 Regulations.
- 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 Section 3 Regulations require employment opportunities to be directed, were not filled to circumvent the Contractor's obligations under Section 3 Regulations.
- F. Noncompliance with HUD's Section 3 Regulations may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.
- G. Section 3 Employment and Training. Without limiting Contractor’s obligation to comply with Section 3 Regulations, the Contractor specifically agrees to use best efforts to provide employment and training opportunities to Section 3 workers in the following order of priority:
1. To residents of the KCHA development where the work is being performed;
 2. To residents of other KCHA developments or for residents of Section 8–assisted housing managed by KCHA;
 3. To participants in YouthBuild programs; and



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4. To low- and very low-income persons residing within the Puget Sound Region.
- H. Section 3 Contracting. Without limiting Contractor’s obligation to comply with Section 3 Regulations, Contractor specifically agrees to use best efforts to award contracts and subcontracts to business concerns that provide economic opportunities to Section 3 workers in the following order of priority:
1. To Section 3 business concerns that provide economic opportunities for KCHA residents of the development where the work is being performed;
 2. To Section 3 business concerns that provide economic opportunities for KCHA residents of other KCHA developments or Section–8 assisted housing managed by KCHA;
 3. To YouthBuild programs; and
 4. To Section 3 business concerns that provide economic opportunities to Section 3 workers residing within the Puget Sound Region.

SECTION 3 – SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

LOCAL RESIDENT HIRING AND CONTRACTING (SECTION 3) REQUIREMENTS:

The Owner's or King County Housing Authority's (KCHA) goal for this project is to participate in Section 3 activities by including efforts that will provide employment opportunities to Section 3 workers and contracting opportunities to Section 3 businesses. (Section 3 workers and Section 3 Businesses are defined below and in 24 CFR 75.)

The Contractor and its Subcontractors at all tiers for this specific contract will partner with the Owner to contribute to the Owner's overall "Section 3" goals, as described below.

Because local hiring and contracting requirements are defined under Section 3 of the Housing and Community Development Act of 1968, these requirements are commonly referred to as Section 3. The definitions and goals are defined in Sections A and B below. Section C describes the process. Section D discusses consequences of non-compliance with Section 3 goals and Section E describes some local hiring resources. For more information on the Owner's employment and training efforts, or compliance with Section 3, please contact KCHA by email at Section3@kcha.org.

A. Section 3 Definitions

For the purposes of this solicitation:

1. "Section 3 worker" means any worker who currently fits or when hired within the past five years fit at least one of the following categories, as documented:
 - a. The worker's income for the previous or annualized calendar year is below the income limit established by HUD. (See Pg. 4 of this section for HUD income limits)
 - b. The worker is employed by a Section 3 business concern.
 - c. The worker is a YouthBuild participant.
2. "Targeted Section 3 worker" means a Section 3 worker who is:
 - a. A worker employed by a Section 3 business concern; or
 - b. A worker who currently fits or when hired fit at least one of the following categories, as documented within the past five years:
 - i. A resident of public housing or Section 8–assisted housing;
 - ii. A resident of other public housing projects or Section 8–assisted housing managed by the PHA that is providing the assistance; or
 - iii. A YouthBuild participant.
3. "Business concern" means a business entity formed in accordance with State law, and which is licensed under State, county, or municipal law to engage in the type of business activity for which it was formed.
4. "Section 3 business concern" means a business concern meeting at least one of the following criteria, documented within the last six-month period:
 - a. It is at least 51 percent owned and controlled by low- or very low-income persons;
 - b. Over 75 percent of the labor hours performed for the business over the prior three-month period are performed by Section 3 workers; or
 - c. It is a business at least 51 percent owned and controlled by current public housing residents or residents who currently live in Section 8–assisted housing.
5. The greatest extent feasible means:
 - a. Completing and submitting a Section 3 Work Plan to designated Owner staff prior to contract signing (template to be provided by the Owner).
 - b. If contracting with Section 3 business concerns:
 - i. Placing qualified business enterprises on solicitation lists.

- ii. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation of qualified Section 3 businesses.
- iii. 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 to identify potential Section 3 businesses.
- iv. Ensuring that small and minority businesses and women’s business enterprises are solicited whenever they are potential sources.
- c. If hiring Section 3 workers:
 - i. Post job opportunities for a mutually agreed upon length of time through the Owner’s employment agency service partners and at project site as appropriate.
 - ii. Conduct interviews with qualified Section 3 workers.
 - iii. Notify designated Owner (KCHA) staff of all new hires.
- d. For both: Complete Section 3 compliance and tracking paperwork as necessary.

B. Section 3 Goals

The Owner will require, to the greatest extent feasible, for the Contractor to demonstrate participation in the local hiring and contracting requirements as defined under Section 3 of the Housing and Community Development Act of 1968.

1. Bidders shall demonstrate compliance with the Section 3 goals by making a best faith effort to achieve the following benchmarks:
 - a. Twenty-five (25) percent or more of the total number of labor hours worked by all workers are Section 3 workers; and
 - b. Five (5) percent or more of the total number of labor hours worked by all workers are Targeted Section 3 workers.
2. The successful bidder and covered subcontractors shall direct their efforts to provide Section 3 employment opportunities to Section 3 workers in the following order of priority:
 - a. First Priority: Current residents of KCHA development(s) benefitting from project.
 - b. Second Priority: Other Owner public housing and Section 8 voucher- assisted residents.
 - c. Third Priority: Participants in HUD Youthbuild programs.
 - d. Fourth Priority: Other low or very low income individuals in the Housing Authorities metropolitan area (Puget Sound region) who are at or below the Area’s Low Income calculation.
3. The Contractor and covered subcontractors shall direct their efforts to award contracts to Section 3 business concerns in the following order of priority:
 - a. First Priority: To Section 3 business concern that provides economic opportunities for KCHA residents at the site(s) where the work will take place.
 - b. Second Priority: To Section 3 business concerns that provide economic opportunities for residents of other KCHA developments or Section–8 assisted housing managed by KCHA.
 - c. Third Priority: A subcontractor that is a HUD Youthbuild company.
 - d. Fourth Priority: To Section 3 business concerns that provide economic opportunities to Section 3 workers residing within the metropolitan area (Puget Sound).
4. Sealed Bidding
In order for KCHA to meet or exceed its adopted goal that 3% of all non-construction contracts and 10% of construction contracts paid in whole or in part with HUD funds be awarded to Section 3 businesses, KCHA may elect, on a contract-by-contract basis, to award a competitively bid contract to a responsible bidder other than the lowest responsive bidder by using the following procedure:

Bids shall be solicited from both Section 3 and non-Section 3 business concerns. KCHA may award the contract to the qualified Section 3 business concern with the highest priority ranking

and with the lowest responsive bid if:

- a. the specific project or KCHA as an agency is otherwise not expected to meet Section 3 utilization goals; and,
- b. the bid is within the maximum total contract price established in KCHA’s budget for the specific project for which bids are being taken; and,
- c. the sources of funds for the project are such that there are no conflicts between this procedure and applicable state law; and,
- d. the bid is not more than five percent (5%) higher than the total bid price for the lowest responsive bid from any responsible, bidder.

If no responsive bid by a Section 3 business concern meets the requirements above, the contract shall be awarded to a responsible bidder with the lowest responsive bid.

C. The Process

1. Contract is awarded to lowest responsible Bidder.
2. Section 3 orientation with Owner. Once the Notice of Intent to Award has been issued to the successful Bidder, Owner’s staff will contact that Bidder and arrange for a meeting to discuss local hiring and contracting goals and strategies in greater detail. At this meeting, the Contractor will be provided a packet that will include a Section 3 overview, Section 3 certification form, and all Section 3 compliance and tracking forms that will be used throughout the contract.
3. Contractor reports on Section 3 activities monthly.

D. Penalties for Non-compliance

Owner’s commitment to this program is reflected in part by the cost of administering the program. Failure to make a good faith effort to the greatest extent feasible negates such funding and impairs the Owner’s efforts to promote workforce diversity and to provide fair and equal opportunities to the public as a whole as a result of the expenditure of public funds. Therefore, if awarded this contract, the parties will mutually agree that failure to meet the requirements, including but not limited to the submission of required documentation, constitutes a material breach of contract. In the event of such breach, Owner may take any or all of the actions as contained in the Contract Documents.

E. Local Hiring Resources

Contact KCHA by email at Section3@kcha.org to obtain a list of local hiring resources.

SECTION 3 – 2022 INCOME GUIDELINES

Location	Income Limit 1 person		
	Extremely Low Income	Very Low Income	Low Income
Kitsap County (Bremerton, Silverdale)	\$21,600	\$36,050	\$57,650
King/ Snohomish Counties (Seattle, Bellevue, Everett)	\$27,200	\$45,300	\$66,750
Pierce County (Tacoma)	\$21,350	\$35,550	\$56,850
Skagit County (Sedro-Woolley)	\$18,100	\$30,150	\$48,250
Thurston County (Olympia, Tumwater)	\$21,200	\$35,350	\$56,500

PROGRESS PAYMENT SUSPENSION CRITERIA

CRITERIA will include:

1. Non-submittal of Certified Payroll documents (see Informational Form A.12)
2. Non-submittal of Section 3 Labor Hours Benchmark Status Report (see Section C for sample)
3. No lien release with Application for Payment
4. Insurance expires
5. Federal and/or State liens on general contractor
6. Suspension/expiration of WA State contractor's license
7. Work not accomplished
8. Work not approved/ accepted
9. Repeated safety violations not resolved if warnings from KCHA are ignored
10. Incorrect Application for Payment or invoice (whichever is applicable)
11. Non-submittal of the GC Certification Upon Application for Payment (see Section E, Division 1 for sample of KCHA Pay Application which includes the continuation sheet, the payment application and the GC Certification)

EXECUTIVE ORDER 11246 (as AMENDED)

---DISCLAIMER--- <http://www.dol.gov/general/disclaim#statutory>

Executive Order 11246 - Equal Employment Opportunity

SOURCE: The provisions of Executive Order 11246 of Sept. 24, 1965, appear at 30 FR 12319, 12935, 3 CFR, 1964-1965 Comp., p.339, unless otherwise noted.

Under and by virtue of the authority vested in me as President of the United States by the Constitution and statutes of the United States, it is ordered as follows:

Part I - Nondiscrimination in Government Employment

[Part I superseded by EO 11478 of Aug. 8, 1969, 34 FR 12985, 3 CFR, 1966-1970 Comp., p. 803]

Part II - Nondiscrimination in Employment by Government Contractors and Subcontractors**Subpart A - Duties of the Secretary of Labor**

SEC. 201. The Secretary of Labor shall be responsible for the administration and enforcement of Parts II and III of this Order. The Secretary shall adopt such rules and regulations and issue such orders as are deemed necessary and appropriate to achieve the purposes of Parts II and III of this Order.

[Sec. 201 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

Subpart B - Contractors' Agreements

SEC. 202. Except in contracts exempted in accordance with Section 204 of this Order, all Government contracting agencies shall include in every Government contract hereafter entered into the following provisions:

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

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

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

(3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The contractor will comply with all provisions of Executive Order No. 11246 of Sept. 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.



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(5) The contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of Sept. 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the contractor 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 such litigation to protect the interests of the United States."

[Sec. 202 amended by EO 11375 of Oct. 13, 1967, 32 FR 14303, 3 CFR, 1966-1970 Comp., p. 684, EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 203. Each contractor having a contract containing the provisions prescribed in Section 202 shall file, and shall cause each of his subcontractors to file, Compliance Reports with the contracting agency or the Secretary of Labor as may be directed. Compliance Reports shall be filed within such times and shall contain such information as to the practices, policies, programs, and employment policies, programs, and employment statistics of the contractor and each subcontractor, and shall be in such form, as the Secretary of Labor may prescribe.

(b) Bidders or prospective contractors or subcontractors may be required to state whether they have participated in any previous contract subject to the provisions of this Order, or any preceding similar Executive order, and in that event to submit, on behalf of themselves and their proposed subcontractors, Compliance Reports prior to or as an initial part of their bid or negotiation of a contract.

(c) Whenever the contractor or subcontractor has a collective bargaining agreement or other contract or understanding with a labor union or an agency referring workers or providing or supervising apprenticeship or training for such workers, the Compliance Report shall include such information as to such labor union's or agency's practices and policies affecting compliance as the Secretary of Labor may prescribe: Provided, That to the extent such information is within the exclusive possession of a labor union or an agency referring workers or providing or supervising apprenticeship or training and such labor union or agency shall refuse to furnish such information to the contractor, the contractor shall so certify to the Secretary of Labor as part of its Compliance Report and shall set forth what efforts he has made to obtain such information.

(d) The Secretary of Labor may direct that any bidder or prospective contractor or subcontractor shall submit, as part of his Compliance Report, a statement in writing, signed by an authorized officer or agent on behalf of any labor union or any agency referring workers or providing or supervising apprenticeship or other training, with which the bidder or prospective contractor deals, with supporting information, to the effect that the signer's practices and policies do not discriminate on the grounds of race, color, religion, sex or national origin, and that the signer either will affirmatively cooperate in the implementation of the policy and provisions of this Order or that it consents and agrees that recruitment, employment, and the terms and conditions of employment under the proposed contract shall be in accordance with the purposes and



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provisions of the order. In the event that the union, or the agency shall refuse to execute such a statement, the Compliance Report shall so certify and set forth what efforts have been made to secure such a statement and such additional factual material as the Secretary of Labor may require.

[Sec. 203 amended by EO 11375 of Oct. 13, 1967, 32 FR 14303, 3 CFR, 1966-1970 Comp., p. 684; EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 204 (a) The Secretary of Labor may, when the Secretary deems that special circumstances in the national interest so require, exempt a contracting agency from the requirement of including any or all of the provisions of Section 202 of this **Order** in any specific contract, subcontract, or purchase **order**.

(b) The Secretary of Labor may, by rule or regulation, exempt certain classes of contracts, subcontracts, or purchase orders (1) whenever work is to be or has been performed outside the United States and no recruitment of workers within the limits of the United States is involved; (2) for standard commercial supplies or raw materials; (3) involving less than specified amounts of money or specified numbers of workers; or (4) to the extent that they involve subcontracts below a specified tier.

(c) Section 202 of this **Order** shall not apply to a Government contractor or subcontractor that is a religious corporation, association, educational institution, or society, with respect to the employment of individuals of a particular religion to perform work connected with the carrying on by such corporation, association, educational institution, or society of its activities. Such contractors and subcontractors are not exempted or excused from complying with the other requirements contained in this **Order**.

(d) The Secretary of Labor may also provide, by rule, regulation, or **order**, for the exemption of facilities of a contractor that are in all respects separate and distinct from activities of the contractor related to the performance of the contract: provided, that such an exemption will not interfere with or impede the effectuation of the purposes of this **Order**: and provided further, that in the absence of such an exemption all facilities shall be covered by the provisions of this **Order**."

[Sec. 204 amended by EO 13279 of Dec. 16, 2002, 67 FR 77141, 3 CFR, 2002 Comp., p. 77141 - 77144]

Subpart C - Powers and Duties of the Secretary of Labor and the Contracting Agencies

SEC. 205. The Secretary of Labor shall be responsible for securing compliance by all Government contractors and subcontractors with this Order and any implementing rules or regulations. All contracting agencies shall comply with the terms of this Order and any implementing rules, regulations, or orders of the Secretary of Labor. Contracting agencies shall cooperate with the Secretary of Labor and shall furnish such information and assistance as the Secretary may require.

[Sec. 205 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 206. The Secretary of Labor may investigate the employment practices of any Government contractor or subcontractor to determine whether or not the contractual provisions specified in Section 202 of this Order have been violated. Such investigation shall be conducted in accordance with the procedures established by the Secretary of Labor.

(b) The Secretary of Labor may receive and investigate complaints by employees or prospective employees of a Government contractor or subcontractor which allege discrimination contrary to the contractual provisions specified in Section 202 of this Order.

[Sec. 206 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 207. The Secretary of Labor shall use his/her best efforts, directly and through interested Federal, State, and local agencies, contractors, and all other available instrumentalities to cause any labor union



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engaged in work under Government contracts or any agency referring workers or providing or supervising apprenticeship or training for or in the course of such work to cooperate in the implementation of the purposes of this Order. The Secretary of Labor shall, in appropriate cases, notify the Equal Employment Opportunity Commission, the Department of Justice, or other appropriate Federal agencies whenever it has reason to believe that the practices of any such labor organization or agency violate Title VI or Title VII of the Civil Rights Act of 1964 or other provision of Federal law.

[Sec. 207 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 208. The Secretary of Labor, or any agency, officer, or employee in the executive branch of the Government designated by rule, regulation, or order of the Secretary, may hold such hearings, public or private, as the Secretary may deem advisable for compliance, enforcement, or educational purposes.

(b) The Secretary of Labor may hold, or cause to be held, hearings in accordance with Subsection of this Section prior to imposing, ordering, or recommending the imposition of penalties and sanctions under this Order. No order for debarment of any contractor from further Government contracts under Section 209(6) shall be made without affording the contractor an opportunity for a hearing.

Subpart D - Sanctions and Penalties

SEC. 209. In accordance with such rules, regulations, or orders as the Secretary of Labor may issue or adopt, the Secretary may:

(1) Publish, or cause to be published, the names of contractors or unions which it has concluded have complied or have failed to comply with the provisions of this Order or of the rules, regulations, and orders of the Secretary of Labor.

(2) Recommend to the Department of Justice that, in cases in which there is substantial or material violation or the threat of substantial or material violation of the contractual provisions set forth in Section 202 of this Order, appropriate proceedings be brought to enforce those provisions, including the enjoining, within the limitations of applicable law, of organizations, individuals, or groups who prevent directly or indirectly, or seek to prevent directly or indirectly, compliance with the provisions of this Order.

(3) Recommend to the Equal Employment Opportunity Commission or the Department of Justice that appropriate proceedings be instituted under Title VII of the Civil Rights Act of 1964.

(4) Recommend to the Department of Justice that criminal proceedings be brought for the furnishing of false information to any contracting agency or to the Secretary of Labor as the case may be.

(5) After consulting with the contracting agency, direct the contracting agency to cancel, terminate, suspend, or cause to be cancelled, terminated, or suspended, any contract, or any portion or portions thereof, for failure of the contractor or subcontractor to comply with equal employment opportunity provisions of the contract. Contracts may be cancelled, terminated, or suspended absolutely or continuance of contracts may be conditioned upon a program for future compliance approved by the Secretary of Labor.

(6) Provide that any contracting agency shall refrain from entering into further contracts, or extensions or other modifications of existing contracts, with any noncomplying contractor, until such contractor has satisfied the Secretary of Labor that such contractor has established and will carry out personnel and employment policies in compliance with the provisions of this Order.

(b) Pursuant to rules and regulations prescribed by the Secretary of Labor, the Secretary shall make reasonable efforts, within a reasonable time limitation, to secure compliance with the contract provisions of this Order by methods of conference, conciliation, mediation, and persuasion before proceedings shall be instituted under subsection (a)(2) of this Section, or before a contract shall be cancelled or terminated in whole or in part under subsection (a)(5) of this Section.

[Sec. 209 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 210. Whenever the Secretary of Labor makes a determination under Section 209, the Secretary shall promptly notify the appropriate agency. The agency shall take the action directed by the Secretary and shall report the results of the action it has taken to the Secretary of Labor within such time as the Secretary shall specify. If the contracting agency fails to take the action directed within thirty days, the Secretary may take the action directly.

[Sec. 210 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 211. If the Secretary shall so direct, contracting agencies shall not enter into contracts with any bidder or prospective contractor unless the bidder or prospective contractor has satisfactorily complied with the provisions of this Order or submits a program for compliance acceptable to the Secretary of Labor.

[Sec. 211 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 212. When a contract has been cancelled or terminated under Section 209(a)(5) or a contractor has been debarred from further Government contracts under Section 209(a)(6) of this Order, because of noncompliance with the contract provisions specified in Section 202 of this Order, the Secretary of Labor shall promptly notify the Comptroller General of the United States.

[Sec. 212 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

Subpart E - Certificates of Merit

SEC. 213. The Secretary of Labor may provide for issuance of a United States Government Certificate of Merit to employers or labor unions, or other agencies which are or may hereafter be engaged in work under Government contracts, if the Secretary is satisfied that the personnel and employment practices of the employer, or that the personnel, training, apprenticeship, membership, grievance and representation, upgrading, and other practices and policies of the labor union or other agency conform to the purposes and provisions of this Order.

SEC. 214. Any Certificate of Merit may at any time be suspended or revoked by the Secretary of Labor if the holder thereof, in the judgment of the Secretary, has failed to comply with the provisions of this Order.

SEC. 215. The Secretary of Labor may provide for the exemption of any employer, labor union, or other agency from any reporting requirements imposed under or pursuant to this Order if such employer, labor union, or other agency has been awarded a Certificate of Merit which has not been suspended or revoked.

Part III - Nondiscrimination Provisions in Federally Assisted Construction Contracts

SEC. 301. Each executive department and agency, which administers a program involving Federal financial assistance shall require as a condition for the approval of any grant, contract, loan, insurance, or guarantee thereunder, which may involve a construction contract, that the applicant for Federal assistance undertake and agree to incorporate, or cause to be incorporated, into all construction contracts paid for in whole or in part with funds obtained from the Federal Government or borrowed on the credit of the Federal Government pursuant to such grant, contract, loan, insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, the provisions prescribed for Government contracts by Section 202 of this Order or such modification thereof, preserving in substance the contractor's obligations thereunder, as may be approved by the Secretary of Labor, together with such additional provisions as the Secretary deems appropriate to establish and protect the interest of the United States in the enforcement of those obligations. Each such applicant shall also undertake and agree (1) to assist and cooperate actively with the Secretary of Labor in obtaining the compliance of contractors and subcontractors with those contract provisions and with the rules, regulations and relevant orders of the Secretary, (2) to obtain and to furnish to the Secretary of Labor such information as the Secretary may require



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for the supervision of such compliance, (3) to carry out sanctions and penalties for violation of such obligations imposed upon contractors and subcontractors by the Secretary of Labor pursuant to Part II, Subpart D, of this Order, and (4) to refrain from entering into any contract subject to this Order, or extension or other modification of such a contract with a contractor debarred from Government contracts under Part II, Subpart D, of this Order.

[Sec. 301 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 302. "Construction contract" as used in this Order means any contract for the construction, rehabilitation, alteration, conversion, extension, or repair of buildings, highways, or other improvements to real property.

(b) The provisions of Part II of this Order shall apply to such construction contracts, and for purposes of such application the administering department or agency shall be considered the contracting agency referred to therein.

(c) The term "applicant" as used in this Order means an applicant for Federal assistance or, as determined by agency regulation, other program participant, with respect to whom an application for any grant, contract, loan, insurance, or guarantee is not finally acted upon prior to the effective date of this Part, and it includes such an applicant after he/she becomes a recipient of such Federal assistance.

SEC. 303. The Secretary of Labor shall be responsible for obtaining the compliance of such applicants with their undertakings under this Order. Each administering department and agency is directed to cooperate with the Secretary of Labor and to furnish the Secretary such information and assistance as the Secretary may require in the performance of the Secretary's functions under this Order.

(b) In the event an applicant fails and refuses to comply with the applicant's undertakings pursuant to this Order, the Secretary of Labor may, after consulting with the administering department or agency, take any or all of the following actions: (1) direct any administering department or agency to cancel, terminate, or suspend in whole or in part the agreement, contract or other arrangement with such applicant with respect to which the failure or refusal occurred; (2) direct any administering department or agency to refrain from extending any further assistance to the applicant under the program with respect to which the failure or refusal occurred until satisfactory assurance of future compliance has been received by the Secretary of Labor from such applicant; and (3) refer the case to the Department of Justice or the Equal Employment Opportunity Commission for appropriate law enforcement or other proceedings.

(c) In no case shall action be taken with respect to an applicant pursuant to clause (1) or (2) of subsection (b) without notice and opportunity for hearing.

[Sec. 303 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 304. Any executive department or agency which imposes by rule, regulation, or order requirements of nondiscrimination in employment, other than requirements imposed pursuant to this Order, may delegate to the Secretary of Labor by agreement such responsibilities with respect to compliance standards, reports, and procedures as would tend to bring the administration of such requirements into conformity with the administration of requirements imposed under this Order: Provided, That actions to effect compliance by recipients of Federal financial assistance with requirements imposed pursuant to Title VI of the Civil Rights Act of 1964 shall be taken in conformity with the procedures and limitations prescribed in Section 602 thereof and the regulations of the administering department or agency issued thereunder.

Part IV - Miscellaneous

SEC. 401. The Secretary of Labor may delegate to any officer, agency, or employee in the Executive branch of the Government, any function or duty of the Secretary under Parts II and III of this Order.



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[Sec. 401 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 402. The Secretary of Labor shall provide administrative support for the execution of the program known as the "Plans for Progress."

SEC. 403. Executive Orders Nos. 10590 (January 19, 1955), 10722 (August 5, 1957), 10925 (March 6, 1961), 11114 (June 22, 1963), and 11162 (July 28, 1964), are hereby superseded and the President's Committee on Equal Employment Opportunity established by Executive Order No. 10925 is hereby abolished. All records and property in the custody of the Committee shall be transferred to the Office of Personnel Management and the Secretary of Labor, as appropriate.

(b) Nothing in this Order shall be deemed to relieve any person of any obligation assumed or imposed under or pursuant to any Executive Order superseded by this Order. All rules, regulations, orders, instructions, designations, and other directives issued by the President's Committee on Equal Employment Opportunity and those issued by the heads of various departments or agencies under or pursuant to any of the Executive orders superseded by this Order, shall, to the extent that they are not inconsistent with this Order, remain in full force and effect unless and until revoked or superseded by appropriate authority. References in such directives to provisions of the superseded orders shall be deemed to be references to the comparable provisions of this Order.

[Sec. 403 amended by EO 12107 of Dec. 28, 1978, 44 FR 1055, 3 CFR, 1978 Comp., p. 264]

SEC. 404. The General Services Administration shall take appropriate action to revise the standard Government contract forms to accord with the provisions of this Order and of the rules and regulations of the Secretary of Labor.

SEC. 405. This Order shall become effective thirty days after the date of this Order.

EXECUTIVE ORDER 13496

New Employee Notification Requirements for Federal Contractors and Subcontractors

Under Department of Labor regulations, www.gpo.gov/fdsys/pkg/FR-2010-05-20/pdf/2010-11639.pdf, contractors holding contracts with the Federal government and their subcontractors are required, beginning on June 21, 2010, to post notices informing employees of their rights under the National Labor Relations Act (NLRA). The notice to employees required by the regulations inform employees about their rights under the NLRA to form, join and assist a union and to bargain collectively with their employer; provides examples of unlawful employer and union conduct that interferes with those rights; and indicates how employees can contact the National Labor Relations Board, the Federal agency that enforces those rights, with questions or to file complaints. Contractors that violate the Labor Department's regulations requiring employee notification of these rights may be subject to sanctions, including suspension or cancellation of the contract.

The regulations require Federal contractors:

1. to post the required employee notice conspicuously in and around their plants and offices so that it is prominent and readily seen by employees who are covered by the NLRA and who engage in contract-related activity;
2. to post the required notice electronically if they communicate with employees electronically, which requires posting a link to the Department of Labor's website containing the employee notice where they customarily place other electronic notices to employees about their jobs; and
3. to insert provisions in their subcontracts that require their subcontractors to comply with the same posting requirements as well.

Contractors and subcontractors may obtain the required poster in any of the three ways. The Labor Department will print posters and provide them to Federal contracting departments and agencies for supply to contractors and subcontractors. In addition, contractors and subcontractors can request posters from the field offices of the Labor Department's Office of Federal Contract Compliance Programs (<http://www.dol.gov/ofccp/contacts/ofnation2.htm>), or Office of Labor-Management Standards (OLMS) (<http://www.dol.gov/olms/contacts/lmskey.htm>). Finally, contractors and subcontractors can acquire the poster from OLMS' website by downloading it from <http://www.dol.gov/olms> or by calling (202) 693-0123. Compliance information for contractors and subcontractors can be found at OFCCP's website [Construction Compliance Checks Frequently Asked Questions | U.S. Department of Labor \(dol.gov\)](#)

EXECUTIVE ORDER 13496 - FREQUENTLY ASKED QUESTIONS

[Executive Order 13496 Frequently Asked Questions | U.S. Department of Labor \(dol.gov\)](#)

REQUIREMENTS FOR PUBLIC WORKS PROJECTS

REQUIREMENTS FOR PUBLIC WORKS PROJECTS – All projects require that the contractor and all subcontractors performing labor on the project site must file the Statement of Intent with L&I regardless of the wage determination is set as HUD Non-Routine Maintenance, State Prevailing wages or Davis-Bacon.

Statement of Intent to Pay Prevailing Wages - filed at the start of the project

- A. **Filed Immediately** after the contract is awarded and before work begins, if that is possible. **NO PAYMENTS CAN BE MADE** until the contractor has submitted an Intent form that has been approved by the Industrial Statistician.
- B. **SUBCONTRACTORS must file using the PRIME CONTRACTOR’S “Form ID Number” after the PRIME has received approval for their Statement of Intent.**
- C. Wage payment requirements for this project are determined to be
 - 1. **Davis-Bacon (NA)**
 - 2. **HUD Non-Routine Maintenance**
 - a. The Intent is then filed with the question “*Is this a Housing Act of 1937 Project?*” answered as **Yes**.
 - b. See the Informational Form A.13b for the sample of Intent to Pay Prevailing Wages with the highlighted statement shown on the form.

Certified Payroll - filed each week for the duration of the project

- A. Submitted on a weekly basis, beginning with the first week that the Contractor works on the Project, and for every week afterward until the Contractor completes the Work.
- B. Consisting of a certified payroll report and a statement of compliance.
- C. See Informational Form A.13c for more information.
NOTE: *These requirements will also apply to HUD Non-Routine Maintenance Wages.*


Affidavit of Wages Paid - filed at the end of the project

- A. Submitted at the end of the project once all of the work has been completed, showing the wages paid to employees who worked on the project.

SCREEN SHOTS OF INTENT

File Intent: Enter the Project Details

STEP 1 Select Contract Type	STEP 2 Project Details	STEP 3 Intent Details	STEP 4 Add Wages	STEP 5 Review Intent	STEP 6 Payment Details
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Project Details**Contract Type****Bid-Build (Traditional)**Bid Due Date (required) Contract Award Date (required) 

Awarding Agency


KING COUNTY HOUSING AUTHORITY

Awarding Agency Address

700 ANDOVER PARK SW TUKWILA, WA – 98188

Awarding Agency Contact Name (required)

Awarding Agency Contact Phone Number (required)

 Ext Awarding Agency Contract Number (required) 

Project Name (required)


Is apprentice utilization required? (required)

 Yes No

Is OMWBE utilization required? (required)

 Yes No

Is this a Housing Act of 1937 project? (required)

 Yes NoProject Site Address or Directions 

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**REQUIREMENTS FOR CERTIFIED PAYROLL per CFR TITLE 29 SUBTITLE A
DAVIS BACON & RELATED ACTS PROVISIONS & PROCEDURES****§ 5.5 Contract provisions and related matters.**

(a) The Agency head shall cause or require the contracting officer to insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a public building or public work, or building or work financed in whole or in part from Federal funds or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the acts listed in § 5.1, the following clauses (or any modifications thereof to meet the particular needs of the agency, *Provided*, That such modifications are first approved by the Department of Labor):

(1) *Minimum wages.*

(i) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; 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 particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in § 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) 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.

(ii)

(A) The contracting officer shall require that 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. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed



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- by a classification in the wage determination; and
- (2) The classification is utilized in the area by the construction industry; and
 - (3) The proposed wage rate, including any 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 the contracting officer 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 the contracting officer to the Administrator of the Wage and Hour Division, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer 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 the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30- day period that additional time is necessary.
- (D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- (iii) 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.
 - (iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.
- (2) *Withholding.* The **King County Housing Authority** shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of



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the wages required by the contract, the (Agency) may, after written notice to the contractor, sponsor, applicant, or owner, 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.

(3) *Payrolls and basic records.*

(i) 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 at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis- Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)

(A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the **King County Housing Authority** if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to the **King County Housing Authority**. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (*e.g.*, the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the **King County Housing Authority** if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit them to the applicant, sponsor, or owner, as the case may be, for transmission to the **King County Housing Authority**, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, sponsor, or owner).



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- (B) 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:
 - (1) That the payroll for the payroll period contains the information required to be provided under § 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
 - (2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
 - (3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the “Statement of Compliance” required by paragraph (a)(3)(ii)(B) of this section.
- (D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- (iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the **King County Housing Authority** or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.
- (4) *Apprentices and trainees* -
 - (i) *Apprentices.* Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above,



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shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, 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.

- (ii) *Trainees.* Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on 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 on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
 - (iii) *Equal Employment Opportunity.* The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
- (5) *Compliance with Copeland Act requirements.* The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

- (6) *Subcontracts.* The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the (write in the name of the Federal agency) may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- (7) *Contract Termination: Debarment.* A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- (8) *Compliance with Davis-Bacon and Related Act requirements.* All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- (9) *Disputes concerning labor standards.* Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.
- (10) *Certification of eligibility.*
 - (i) 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 Government contracts by virtue of section 3(a) of the Davis- Bacon Act or 29 CFR 5.12(a)(1).
 - (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
 - (iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.
- (b) *Contract Work Hours and Safety Standards Act.* The Agency Head shall cause or require the contracting officer to insert the following clauses set forth in paragraphs (b)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by § 5.5(a) or § 4.6 of part 4 of this title. As used in this paragraph, the terms *laborers* and *mechanics* include watchmen and guards.
 - (1) *Overtime requirements.* No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
 - (2) *Violation; liability for unpaid wages; liquidated damages.* In the event of any violation of the clause set forth in paragraph (b)(1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of \$29 for each calendar day on which such individual was required or permitted to



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work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.

- (3) *Withholding for unpaid wages and liquidated damages.* The (write in the name of the Federal agency or the loan or grant recipient) 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 other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.
 - (4) *Subcontracts.* The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.
- (c) In addition to the clauses contained in paragraph (b), in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in § 5.1, the Agency Head shall cause or require the contracting officer to insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Agency Head shall cause or require the contracting officer to insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the (write the name of agency) and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.



B - SECTION

EASTRIDGE HOUSE FIRE MONITORING SYSTEM UPGRADE

120 West Sunset Way, Issaquah, WA 98027

DUE DATE: May 17, 2023

TIME: 1:00 pm

In order to be considered as **RESPONSIVE BIDS**, all bidders **MUST** submit the following **Signed Documents (each single sided)** no later than the **Bid Due Date and Time**.

Forms to Return if Bidding

- B.1 Bid Form**
- B.2 Bidder's Experience Record**
- B.3 Contractor Certification**
- B.4 Non-Collusive Affidavit**
- B.5 Equal Opportunity**
- B.6 Bid Security (Submit only for bids greater than \$150,000)**
- B.7 Debarment / Suspension Compliance Certification**
- B.8 Proposed Subcontractor List**
- B.9 Section 3**
 - a. Business Certification**
 - b. Subcontractor Work Plan**
- B.10 Harassment and Discrimination Policies**
- B.11 WMBE Survey (Form is not required to be responsive, but requested)**
- B.12 Preliminary Project Schedule – Provided by Contractor**



BID FORM – RETURN EACH FORM SINGLE SIDED

BID TO:

KING COUNTY HOUSING AUTHORITY
CAPITAL CONSTRUCTION DEPARTMENT
700 Andover Park West, Suite C * Tukwila, WA 98188

PROJECT NAME AND LOCATION:

Eastridge House Fire Monitoring System Upgrade
120 West Sunset Way, Issaquah, WA 98027

SCOPE OF WORK:

Eastridge House is a three (3) story building that was constructed in 1971 and consists of thirty-nine (39) one (1) bedroom apartments and one (1) two (2) bedroom; all units have one (1) bathroom. The building is of wood construction with gypsum interior walls/ceilings (common corridors have a grid drop ceiling), and a masonry exterior veneer. Contractor to verify conditions. The building has one (1) elevator, one (1) main lobby, two (2) offices, one (1) garbage room, one (1) maintenance room, one (1) laundry room, one (1) elevator equipment room, one (1) electrical equipment room, two (2) three-story stairwells, one (1) community room, one (1) storage room, one (1) common kitchen, one (1) men and (1) women’s restroom, and a common corridor all floors. The second and third floors contain one (1) elevator lobby and tenant units. In addition, the building houses three (3) ADA type units, all located on the first floor (ADA units 110, 112, and 113). The majority of the population consists of the elderly and disabled. KCHA has had hazardous materials testing completed in 2013. Reports supplied in bid documents.

The Eastridge House Fire Monitoring System Upgrade is design-build in nature and shall be all-inclusive for a complete turnkey system that meets all standards, KCHA specifications and plans, applicable codes, and permit requirements. KCHA has added elements to the system that may exceed jurisdictional standards. To ensure all KCHA project details are included in the Contractor's design, the Contractor will need to submit shop drawings of the new fire monitoring system to KCHA for approval before being submitted for review by the Fire Marshall. In the bid documents, KCHA has provided a site assessment of existing fire monitoring system with upgrade recommendations, and a system code analysis for new system requirements. It is up to the Contractor to design a system using the recommendations provided.

All new wiring must be concealed behind Gypsum Wall Board (GWB) or in KCHA-approved line covers. There may be variations in the layout from the plan depictions, and it is the Contractor's responsibility to verify actual conditions. The Contractor is to carry a contingency in their bid proposal accounting for variations and will be responsible for all wiring, device installation, routing, connections, testing, and restoration of the interior and exterior elements affected by the work. Existing fire alarms in tenant units will be removed and the electrical boxes covered with a blank plates. The existing fire alarms in the common hallways will be removed along with the electrical box and the drywall hole patched and painted. The wall will be painted corner to corner, top to bottom. The Contractor will keep the existing active alarm system running until the new fire monitoring system is activated and passed inspections. The duration of this project is ninety (90) calendar days from Notice to Proceed.

The Contractor must take all precautions to provide a safe work site for the residents, staff, and workers. The Contractor is to provide two-week look-ahead schedules throughout the project so that KCHA staff can notify residents of unit entries 48 hours in advance. The Contractor is responsible for protecting both tenant/KCHA physical assets and is required to mitigate dust and debris using tarps, zip walls, HEPA

Bidding Contractor’s Company Name: _____ Initials: _____



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vacuums, etc. The Contractor to provide the Owner a turnkey fire monitoring system and include all design, reviews, permits, testing, materials, labor, and equipment in bid.

For complete scope, please see E.1 Scope of Work and Technical Specifications

BASE BID:

Bidders must provide a cost for **each and every** bid item (even if the amount is **\$0.00**), for the bid to be considered responsive. Where conflict occurs between the bid item values entered and the total amount written, the bid item price(s) shall prevail, and totals will be corrected to conform thereto. The work of the various items is described throughout the Contract Documents.

Total Base Bid Lump Sum Amount (Gross Contract Price) should include all applicable taxes. King County Housing Authority (KCHA) will only pay this Gross Contract Price. Contractors shall review the State of Washington Department of Revenue Ruling WAC 458-20-17001 (included in bid documents) and all other applicable documents for tax obligations.

Contractor must pay the attached Davis Bacon / Non-Routine Maintenance as the Minimum Wages and Fringe Benefits for the construction workers under this contract.

The Bidder agrees to accept as full payment for the Work, as specified in the Contract Documents, and based upon the undersigned’s own estimate of quantities and costs, the following stipulated sums.

BASE BID PRICE		
A.	Materials , including all applicable Taxes	\$
B.	Labor	\$
C.	O & P , including all applicable Fees	\$
D.	Owner Allowance for added work contingency, as authorized by KCHA	\$21,000.00
TOTAL BID AMOUNT: (all costs inclusive – A, B, C & D) Round to Nearest Dollar		\$
And No/100 Dollars		
PRINT (in words) Total Bid Amount. Sample – Three Hundred Thousand, Two Hundred Sixty-Six		

ADDITIONAL COVID-19 REQUIREMENTS

Should there be new COVID-19 requirements instituted by the State or County prior to the bid date, they will be addressed in an Addendum.

UNIT PRICES:

Unit prices are considered for use when small quantities are needed and additional competitive bidding is not required for price justification. An unforeseen condition requiring large quantities resulting in a substantial change in scope of new work will not be considered applicable for unit pricing. Large deviations in the scope of work will be addressed and evaluated through a bid process or on a Time Material basis as stipulated in the contract documents. Acceptance of any unit pricing is at the Owner’s discretion.

COMPLETE BID:

Contractor shall include all costs of doing the work shown, described, and intended by the Contract Documents, within the lump sum bid prices in the Proposal.

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LOW BIDDER DETERMINATION:

The determination of the Low Bidder will be determined on the basis of the Grand Total of the Total Base Bid Price plus Owner-Directed Work Total. The Owner reserves the right to accept any, all, or no Additive items at the time of Award, or at any time thereafter.

RIGHT TO AWARD THE CONTRACT:

KCHA reserves the right to award the Contract to the Contractor based on the Contractor’s Qualifications, Bonding Capacity and ability to Complete the Project within the Completion Time allowed for project. If written notice of the acceptance of this bid is mailed, or delivered to the undersigned within Seven (7) 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 within Seven (7) calendar days after the Contract is presented for signature.

RIGHT TO REJECT BIDS:

KCHA Reserves the Right to Reject any and all Bids and select any bid options (Base Bid/Alternate Bid or both). In addition, KCHA Reserves the Right to Refuse to Award a Bid to a Contractor based on the Contractor’s Past Performance, and/or Unresolved Issues with KCHA, as well as unresolved issues with Washington State Labor & Industries. No Extension of Completion is allowed.

KCHA also Reserves the Right to Reject all bids, for any reason, prior to Contract Execution.

The undersigned hereby agrees that this proposal shall be a Valid and Firm Offer for the following calendar days from the date of the Bid Opening.

Calendar Days: SIXTY (60)

If the Contractor’s Bid is determined to be “Not Responsible”, KCHA will issue in writing the specific reasons for this determination. Your company will be allowed to appeal this decision. The appeal must be in writing. The appeal must be delivered to KCHA at the address provided in the determination of ‘Not Responsible’ within two (2) business days after KCHA makes the decision. The appeal may include additional information that was not included in the original Bid Documents. KCHA will make a final determination after the receipt of the appeal. The final determination may not be appealed.

ADDENDUM RECEIPT: (Receipt of the following Addenda is acknowledged)

Addendum No.:	_____	Date:	_____
Addendum No.:	_____	Date:	_____
Addendum No.:	_____	Date:	_____
Addendum No.:	_____	Date:	_____

NO ADDENDA were received

START TIME OF CONSTRUCTION:

Construction for the project must be started in accordance with the written Notice to Proceed Date issued by KCHA.

COMPLETION TIME OF CONSTRUCTION:

The undersigned hereby agrees to significantly complete the project within the construction period or duration (**Construction Period/Duration: NTP “construction start” to physical completion**) all the

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work required under the Contract and in accordance with the Contract Documents. Time allowed to complete the project (including punch list items) shall be the following number of Calendar Days from the Notice to Proceed Date issued by KCHA:

Calendar Days: NINETY (90)*

** This is total construction time and does not include any delays that may be caused by supply chain issues.*

PRELIMINARY SCHEDULE:

MANDATORY: Contractor is to **provide** a preliminary Master Project Schedule in Microsoft Project, Primavera or similar and will include task durations and a project duration/completion date **at time of bid.**

METHOD OF PAYMENT:

Contract Amount shall be paid by KCHA to the Contractor monthly from the date of Contract, based on Contractor’s Invoice of percentage of ‘Completion’. Contractor shall use the AIA-G702 and G703 forms for Application and Certificate for Payment for Invoice Submittal.

CONTRACT RETENTION:

KCHA will withhold Contract Retention at the following Rate, pursuant to the General Conditions and will be released upon receipt of the Proper clearances from all pertinent state agencies. Release of Retention will not be made until All Requirements for Release, including clearances from State Agencies are received.

Retention Rate: FIVE PERCENT (5%)

CLOSEOUT PERCENTAGE:

Contractor to include in his Schedule of Values **Closeout Costs**; this is a percentage of the contract bid amount for costs associated with closing out the project as described in Section 01 77 00.

Closeout Percentage: FIVE PERCENT (5%)

LIQUIDATED DAMAGES:

Timely performance and completion of the Work is essential to the Owner and time limits stated in the Agreement are of the essence. Owner will incur serious and substantial damages if Substantial Completion of the Work or Contract Completion of the entire project does not occur in the time limits defined in the Contract or subsequent change order. Liquidated damages are not assessed as a penalty, but as liquidated damages for breach of contract. The amount is fixed and agreed upon by the Contractor and Owner due to the extreme difficulty and impracticability of fixing and ascertaining the actual damages the Owner would sustain.

This amount is construed as actual amount of damages to the Owner and may be retained by the Owner and deducted from any payments to the Contractor. Assessment of liquidated damages does not release the Contractor for obligations in the Agreement. If different and separate completion dates are stated in the Agreement (or subsequent change order) for separate parts or stages of the Work, the amount of liquidated damages shall apply and may be assessed on those parts or stages of the Work which are delays.

If the Contractor fails to complete the Work by the Time for Substantial Completion stated above (or amended by a subsequent change order), then the Contractor agrees to abide by all provision of the Liquidated Damages clause to the Contract. Liquidated Damages shall be in the following DOLLAR AMOUNT per Calendar Days and will be assessed for each day that the Contractor exceeds the time for substantial completion stated above as follows:

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Dollar Amount: FIVE HUNDRED DOLLARS AND NO/100 (\$500.00)

INDEMNIFICATION AND HOLD HARMLESS:

The Contractor hereby agrees that, to the fullest extent permitted by law, it will defend, indemnify and hold KCHA and its officials, partners, volunteers, agents and employees (the “Indemnities”) harmless from and against any and all claims, losses, damages and expenses, including attorney’s fees incurred with respect thereto or in enforcing this indemnity, which in any manner arise out of or in connection with, or result from:

1. The Work to be performed pursuant to this contract (the ‘Work’), or
2. Any Act or Omission of:
 - a. The Contractor;
 - b. Any Subcontractor, Lower Tier Contractor, or Supplier engaged with respect to the Work;
 - c. Any other party acting at the direction, at the request or under the control of the Contractor with respect to this contract or the Work; or
 - d. The Officers, Directors, Partners, Employees, Volunteers or Agents of any of the foregoing, or the successors in interest of any of them.

Notwithstanding the foregoing, however, the Contractor shall not be required to indemnify and Indemnitee against liability for damages arising out of bodily injury to persons or damage to property caused by or resulting from the intentional misconduct or sole negligence of the Indemnitee, and if such damages are caused by or result from the concurrent negligence of the Indemnitee and the Contractor or its employees or agents, then the Contractor’s indemnity hereunder shall be limited to the extent of the negligence of the Contractor or its employees or agents. For purposes of this Indemnity, the Contractor waives its immunity under industrial insurance, Title 51 of the Revised Code of Washington, and acknowledges that the parties have negotiated this waiver for the purposes of this agreement.

The Contractor hereby agrees to require all its Subcontractors or anyone acting under its direction or control or on its behalf in connection with or incidental to the performance of this contract to execute an indemnity agreement substantively identical to the proceeding one, specifically naming KCHA as an indemnitee, and the Contractor’s failure to do so shall constitute a material breach of this contract by the Contractor.

LOCAL RESIDENCE HIRING AND CONTRACTING REQUIREMENTS FOR SECTION 3:

The undersigned agrees to adhere to the Local Resident Hiring and Contracting Requirements as defined in the Section 3 Documents. Failure to comply with this program “to the greatest extent feasible” may result in the withholding of progress payments until the breach of the contract is remedied. See Section 3 Certification Forms attached.

I certify, under penalty of perjury, that my company **Is a Section 3 Business**

Is Not a Section 3 Business

(For further clarification for Section 3 Certification, refer to Sections A.8 and B.10.a)

BID WITHDRAWAL AFTER BID OPENING:

1. A bidder who submits an erroneous low bid may withdraw the bid at the risk of forfeiting the bid bond. The bid withdrawal is permissible if there was an obvious error in the low bid and the mistake is readily apparent from the bid itself. The bidder must notify KCHA and submit evidence of the error within twenty-four (24) hours of the bid opening.

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2. Evaluating factors for return or forfeiture of bid bonds should include:
 - a. Whether the bidder acted in good faith;
 - b. Whether the bidder acted without gross negligence;
 - c. Whether the bidder gave prompt notice of the error;
 - d. Whether the bidder will suffer substantial detriment by forfeiture;
 - e. Whether KCHA’s status has not greatly changed, and no substantial hardship will be caused.
3. Any low bidder who withdraws its bid is prohibited from bidding on the same project if it is subsequently re-solicited.

NOTIFICATION:

Contractors submitting bids must have current industrial insurance and not be disqualified from bidding (not suspended or debarred by any federal, state, or other public agency).

All or a portion of this contract is paid for by Federal Funds. As a result, Successful Contractors are subject to the following statutes: Section 504 of the Rehabilitation Act of 1973; the Americans with Disabilities Act of 1990; the Architectural Barriers Act of 1968 and the Fair Housing Act of 1988.

It will be the Contractor’s obligation to comply with pertinent laws and implementing regulations, which provide for non-discrimination and accessibility in Federally Funded Housing and Non-Housing Programs for people with Disabilities. To read the full text of the Notice go to www.kcha.org/business/requirements Scroll down to Fair Housing Laws and Read: **Fair Housing / Accessibility Notice**

The undersigned acknowledges:

1. To have carefully reviewed and understood the scope of work and requirements under the Contract Documents and the complete scope of work as required under the Bid Proposal,
2. To have been provided the opportunity to physically assess the project site,
3. And affirms that the bid entered herein, shall be a complete bid in accordance with the terms of the Contract Documents,
4. And hereby agrees to complete the Work required under the terms of the Contract Documents by the Completion Dates enumerated therein, and
5. That all Documents Submitted to KCHA will become Public Records, as per RCW 42.56. If you are submitting information, which you think is confidential and / or proprietary to your business; KCHA recommends that you do not submit that information, as KCHA cannot guarantee that type of information will be withheld from a public disclosure request.

Bidding Contractor’s Company Name: _____ Initials: _____



COMPANY INFORMATION *(please print all information):*

Name of Bidder’s Company

Physical Street Address:

(Contractor MUST have a Physical Street Address)

City-State-Zip:

Mailing Address if different than Physical:

City-State-Zip:

Telephone:

Name of Person Authorized to Sign Contract:

(if Company is Awarded Contract)

Title of Person Authorized to Sign Contract:

(if Company is Awarded Contract)

Email Address of Person Authorized to Sign

Contract:

(if Company is Awarded Contract)

Website:

Contractor’s License (WA State) Number:

UBI (Unified Business License) Number:

Employment Security Account Number:

State Excise Tax Registration Number:

Federal Tax I.D. Number:

Exempt

Public Works Training (RCW39.04.350):

Not Exempt – signed Compliance Statement
in Accordance with RCW 9A.72.085 is
provided

Bidding Contractor’s Company Name: _____ Initials: _____



**KCHA – EASTRIDGE HOUSE FIRE MONITORING SYSTEM UPGRADE
CAPITAL CONSTRUCTION DEPARTMENT**

- Check Box if your company is a Corporation and name the State Incorporated in below.
- Check Box if your company is a Partnership and provide Full Name(s) and Address of all parties below.
- Check Box if your company is also known as (aka) and list that name and address below.

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

SUBMITTED ON: _____ Day of _____, 20____

Signature of Bidder

Print Name and Title

Bidding Contractor's Company Name: _____ Initials: _____



BIDDER'S EXPERIENCE RECORD – RETURN EACH FORM SINGLE SIDED

KCHA WILL AWARD CONTRACTS ONLY TO RESPONSIBLE PROSPECTIVE CONTRACTORS WHO HAVE THE ABILITY TO PERFORM SUCCESSFULLY UNDER THE TERMS AND CONDITIONS OF THE PROPOSED CONTRACT. PRINT ALL INFORMATION.

ATTACH ADDITIONAL SHEETS AS NECESSARY TO FULLY PROVIDE THE INFORMATION REQUIRED.

NAME OF BIDDER: _____

PHYSICAL ADDRESS: _____

CITY-STATE-ZIP: _____

MAILING ADDRESS: _____

CITY-STATE-ZIP: _____

CONTRACTOR'S LICENSE NUMBER: _____ **EMPLOYMENT SECURITY NUMBER:** _____
(Must be a valid WA State License)

BOND REGISTRATION NUMBER: _____ **L&I's WORKERS' COMP. ACCT. ID:** _____

L&I PUBLIC WORKS TRAINING: YES NO

BIDDER IS A(N): INDIVIDUAL PARTNERSHIP
JOINT VENTURE INCORPORATION IN STATE OF _____

CONTINUOUSLY BEEN IN BUSINESS FROM YEAR _____ **NO. OF REGULAR FULL TIME EMPLOYEES** _____

TOTAL NUMBER OF PROJECT COMPLETED IN THE PAST 5 YEARS _____

NUMBER OF PROJECTS COMPLETED _____ **AHEAD** _____ **ON-TIME** _____ **BEHIND**

BIDDER HAS HAD EXPERIENCE IN WORK COMPARABLE TO THAT REQUIRED FOR THIS PROJECT

AS FOLLOWS: **AS PRIME CONTRACTOR:** _____ **AS SUB-CONTRACTOR:** _____
NO. OF YEARS NO. OF YEARS

BIDDERS LIST THE FOLLOWING INFORMATION: PRINT ALL INFORMATION

NAME OF BONDING COMPANY: _____

ADDRESS: _____

PHONE NUMBER: _____

CONTACT PERSON: _____

BONDING CAPACITY: _____



KCHA - EASTRIDGE HOUSE FIRE MONITORING SYSTEM UPGRADE
CAPITAL CONSTRUCTION DEPARTMENT

LIST THE SUPERVISORY PERSONNEL TO BE EMPLOYED BY THE BIDDER AND AVAILABLE FOR, AND INTENDED TO WORK ON THIS PROJECT (PROJECT MANAGER, PRINCIPAL FOREPERSON, SUPERINTENDENTS AND ENGINEERS): **PRINT ALL INFORMATION**

NAME	TITLE	HOW LONG WITH BIDDER
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

LIST ALL PUBLICLY FUNDED PROJECTS OF SIMILAR NATURE & SIZE COMPLETED BY BIDDER WITHIN THE PAST 5 YEARS. INCLUDE A REFERENCE FOR EACH. IF NECESSARY, ATTACH A SEPARATE SHEET(S), USING THE FORMAT BELOW. **PRINT ALL INFORMATION**

PROJECT NAME: _____

OWNER/CONTACT NAME & NUMBER: _____

TOTAL CONTRACT AMOUNT: _____

IF SUB, YOUR CONTRACT AMOUNT: _____

YEAR PROJECT COMPLETED: _____

PROJECT NAME: _____

OWNER/CONTACT NAME & NUMBER: _____

TOTAL CONTRACT AMOUNT: _____

IF SUB, YOUR CONTRACT AMOUNT: _____

YEAR PROJECT COMPLETED: _____

PROJECT NAME: _____

OWNER/CONTACT NAME & NUMBER: _____

TOTAL CONTRACT AMOUNT: _____

IF SUB, YOUR CONTRACT AMOUNT: _____

YEAR PROJECT COMPLETED: _____

PROJECT NAME: _____

OWNER/CONTACT NAME & NUMBER: _____

TOTAL CONTRACT AMOUNT: _____

IF SUB, YOUR CONTRACT AMOUNT: _____

YEAR PROJECT COMPLETED: _____



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IF ANY OF THE PROJECTS LISTED ABOVE WERE NOT COMPLETED WITHIN THEIR ORIGINALLY SCHEDULED PERIOD, EXPLAIN WHY: **PRINT ALL INFORMATION**

LIST ALL PROJECTS UNDERTAKEN IN THE LAST 5 YEARS WHICH HAVE RESULTED IN PARTIAL OR FINAL SETTLEMENT OF THE CONTRACT BY ARBITRATION OR LITIGATION IN THE COURTS: **PRINT ALL INFORMATION**

<u>NAME OF CLIENT & PROJECT</u>	<u>CONTRACT AMT.</u>	<u>TOTAL CLAIM ARBITRATED / LITIGATED</u>	<u>AMT. OF SETTLEMENTS OF CLAIM</u>
<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>

HAS BIDDER, OR ANY REPRESENTATIVE OR PARTNER THEREOF, EVER FAILED TO COMPLETE A CONTRACT? **PRINT ALL INFORMATION**

NO YES IF YES, EXPLAIN

HAS THE BIDDER EVER HAD ANY PAYMENT / PERFORMANCE BOND CALLED AS A RESULT OF THIS WORK? **PRINT ALL INFORMATION**

NO YES IF YES, COMPLETE THE FOLLOWING:

<u>PROJECT NAME</u>	<u>CONTRACTING PARTY</u>	<u>BOND AMOUNT</u>
<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>

HAS BIDDER EVER BEEN FOUND GUILTY OF VIOLATING ANY STATE OR FEDERAL EMPLOYMENT LAWS? **PRINT ALL INFORMATION**

NO YES IF YES, EXPLAIN

HAS BIDDER EVER FILED FOR PROTECTION UNDER ANY PROVISION OF THE FEDERAL BANKRUPTCY LAWS OR STATE INSOLVENCY LAWS? **PRINT ALL INFORMATION**

NO YES IF YES, EXPLAIN



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HAS ANY ADVERSE LEGAL JUDGEMENT RELATED TO CONSTRUCTION BEEN RENDERED AGAINST THE BIDDER IN THE LATE 5 YEARS? **PRINT ALL INFORMATION**

NO YES IF YES, EXPLAIN _____

HAS BIDDER OR ANY OF ITS EMPLOYEES FILED ANY CLAIMS WITH WASHINGTON STATE WORKER'S COMPENSATION OR OTHER INSURANCE COMPANY FOR ACCIDENTS RESULTING IN FATAL INJURY OR DISMEMBERMENT IN THE PAST 5 YEARS? **PRINT ALL INFORMATION**

NO YES IF YES, COMPLETE THE FOLLOWING:

DATE	TYPE OF INJURY	AGENCY RECEIVING CLAIM
_____	_____	_____
_____	_____	_____
_____	_____	_____

BIDDER'S EXPERIENCE MODIFICATION RATE (EMR): 2020 _____ 2021 _____ 2022 _____
(IF BIDDER IS SELF-INSURED, ATTACH PROOF OF EMR STATED, SHOWING COMPLETE WORKSHEET CALCULATIONS)

NOTES TO BIDDERS: SAFETY IS A PRIMARY CONCERN ON THIS PROJECT. KCHA reserves the right to disqualify Bidders where either the current or three (3) year average of the Experience Modification Rate (EMR) EXCEEDS 1.0. KCHA may require additional information from Bidders that have an EMR of more than 1.0.

DESCRIBE ALL VIOLATION CITATIONS ISSUED AGAINST BIDDER IN THE LAST 5 YEARS UNDER OSHA, WISHA OR OTHER APPLICABLE WORKPLACE SAFETY PROGRAMS. **PRINT ALL INFORMATION**

SUBJECT OF VIOLATION	DATE OF INSPECTION / INCIDENT	OSHA ACTIVITY NO.	CLOSED / PENDING
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

ADDITIONAL INFORMATION:

BEFORE A BID IS CONSIDERED FOR AWARD, THE BIDDER MAY BE REQUESTED BY KCHA TO SUBMIT A STATEMENT OR OTHER DOCUMENTATION REGARDING ANY OF THE BASIC QUALIFICATIONS LISTED ABOVE. FAILURE BY THE BIDDER TO PROVIDE SUCH ADDITIONAL INFORMATION SHALL RENDER THE BIDDER NON-RESPONSIVE AND NON-RESPONSIBLE, AND INELIGIBLE FOR AWARD.

THE UNDERSIGNED WARRANTS UNDER PENALTY OF PERJURY THAT THE FOREGOING INFORMATION IS COMPLETE, TRUE AND ACCURATE TO THE BEST OF HIS / HER KNOWLEDGE. THE UNDERSIGNED AUTHORIZES THE KING COUNTY HOUSING AUTHORITY TO VERIFY ALL INFORMATION CONTAINED HEREIN. (IF THIS INFORMATION IS NOT COMPLETE AND ACCURATE THE BID MAY BE CONSIDERED NON-RESPONSIVE.)

BIDDER'S SIGNATURE BIDDER'S NAME (PLEASE PRINT)

BIDDER'S TITLE (PLEASE PRINT) DATE



CONTRACTOR CERTIFICATION – RETURN EACH FORM SINGLE SIDED

PROJECT NAME: EASTRIDGE HOUSE FIRE MONITORING SYSTEM UPGRADE

NAME OF COMPANY: _____

PHYSICAL STREET ADDRESS: _____

CITY – STATE – ZIP: _____

MAILING ADDRESS: _____

CITY – STATE – ZIP: _____

PHONE NUMBER: _____

FEDERAL TAX ID NO.: _____ WA STATE UBI NO.: _____

TYPE OF BUSINESS: _____ CORPORATION _____ LLC - PARTNERSHIP _____ SOLE PROPRIETOR

OWNERS OF THIS COMPANY (List All Owners from the inception of the Company. Use an additional sheet of paper if necessary.)

NAME OF OWNER(S)	DATE(S) OF OWNERSHIP (from – to)
_____	_____
_____	_____
_____	_____

UNDER PENALTIES OF PERJURY, _____ **I** / _____ **We** hereby certify that: (Check the appropriate responses)

- _____ **I** / _____ **We** have a complete copy of the Bid Documents and Drawings (if applicable) for this project as supplied by the King County Housing Authority.
- _____ **I** / _____ **We** have no contractual obligation or other disabilities that would prevent _____ **Me** / _____ **Us** from meeting the various requirements contained in the Bid Documents to the greatest extent feasible and with good faith efforts to attempt to meet the attached goals.
- _____ **I** / _____ **We** do not and will not maintain, nor permit _____ **My** / _____ **Our** employees to work in a location where segregated facilities are maintained, except for separate or single-user toilets and changing facilities, if necessary, to assure privacy between the sexes.
- _____ **I** / _____ **We** that _____ **Have** / _____ **Have Not** participated in an Equal Employment Opportunity Plan in the past that required filing reports with the Government; and that if _____ **I** / _____ **We** have, _____ **I** / _____ **We** _____ **Have** / _____ **Have Not** filed all reports due. If not, the reports will be filed within the next (_____) days.
- The number shown on this form is _____ **My** / _____ **Our** correct Taxpayer Identification Number OR _____ **I Am** / _____ **We Are** waiting for a number to be issued to _____ **Me** / _____ **Us** and
- _____ **I** / _____ **We** further certify that _____ **I** / _____ **We** are not subject to Backup Withholding because;
 - _____ **I Am** / _____ **We Are** Exempt from Backup Withholding, or
 - _____ **I** / _____ **We** have not been notified by the Internal Revenue Service (IRS) that _____ **I Am** / _____ **We Are** subject to Backup Withholding as a result of a failure to report all interest or dividends, or



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(c) the IRS has notified ____ **Me** / ____ **Us** that ____ **I Am** / ____ **We Are** no longer subject to Backup Withholding.

(If you ARE subject to Backup Withholding, leave #6 blank and go to #7)

7. ____ **I** / ____ **We** have been notified by the IRS that ____ **I Am** / ____ **We Are** currently subject to Backup Withholding because of under reporting interest or dividends.

(If you filled out #6 – you are NOT subject to Backup Withholding, leave #7 blank)

8. _____, who is by title the _____ of our firm/company and has been designated, as the responsible official to ensure required reports are submitted, and record keeping complies with all the applicable regulations.

AUTHORIZED OFFICIAL:

SIGNATURE

NAME (PLEASE PRINT)

TITLE (PLEASE PRINT)

DATE



NON-COLLUSIVE AFFIDAVIT – RETURN EACH FORM SINGLE SIDED

FOR CONTRACTS AND EQUIPMENT \$50,000 AND ABOVE

STATE OF WASHINGTON)
)
COUNTY OF KING) ss

_____, being first duly sworn, deposes and says:

That he / she is a Partner or Officer of the Firm of, etc. _____

The party making the forgoing proposal or bid, that such proposal or bid is genuine and not collusive or a sham; that said bidder has not colluded, conspired, 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, or of that of any other bidder, or to secure any advantage against KING COUNTY HOUSING AUTHORITY or any person interested in the proposed contract; and that all statements in said proposal or bid are true.

SIGNATURE OF AUTHORIZED OFFICIAL

_____ **Bidder, if the Bidder is an Individual**

_____ **Partner, if the Bidder is a Partnership**

_____ **Officer, if the Bidder is a Corporation**

SUBSCRIBED AND SWORN to before me:

this _____ day of _____, 20 _____

(Signature)

(Print Name)

My Commission Expires: _____, 20_____

Bidding Contractor’s Company Name: _____ Initials: _____



EQUAL OPPORTUNITY CLAUSE – RETURN EACH FORM SINGLE SIDED

DURING THE PERFORMANCE OF THIS CONTRACT, THE CONTRACTOR AGREES AS FOLLOWS:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin, citizenship status, creed, age, marital status, physical or mental disability, sexual orientation, political ideology, or status as a Vietnam era or specially disabled veteran. The Contractor will take affirmative action to ensure that applicants are employed and the employees are treated during employment without regard to the aforementioned conditions. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of this nondiscrimination clause.
2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to the aforementioned conditions of paragraph 1 above.
3. The Contractor will send to each labor union or representative of workers with which he/she has a collective bargaining agreement or other contract or understanding, a notice advising the labor union or workers' representative of the Contractor's commitments under Section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
4. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations and relevant orders of the Secretary of Labor.
5. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations and relevant orders of the Secretary of Labor, or pursuant thereto, and will permit access to his/her books, records and accounts by the Owner and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.
6. In the event of the Contractor's non-compliance with the non-discrimination clauses of the Contract or with any of such rules, regulations or orders, this Contract may be canceled, terminated or suspended in whole or in part and the Contractor may be declared ineligible for further Government Contracts, in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rules, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
7. The Contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulation, or order of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the Owner may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Owner, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

AUTHORIZED OFFICIAL:

SIGNATURE

NAME (PLEASE PRINT)

TITLE (PLEASE PRINT)

DATE

Bidding Contractor's Company Name: _____ Initials: _____



BID SECURITY – RETURN EACH FORM SINGLE SIDED

BID DEPOSIT:

The undersigned Principal hereby deposits a Bid Deposit with the King County Housing Authority in the form of a cash deposit, certified or cashier's check, or postal money order in the amount of:

_____ Dollars (\$_____)

-- OR --

BID BOND:

The undersigned, _____ (Principal), and

_____ (Surety), are held and firmly bound unto the King County Housing Authority (Owner) in the penal sum of:

_____ Dollars (\$_____),

which for the payment of which Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally. The liability of surety under this Bid Bond shall be limited to the penal sum of this Bid Bond.

CONDITIONS:

The Bid Deposit or Bid Bond shall be an amount not less than **five percent (5%)** of the total bid, including any Alternates, Additives, and Owner-Directed Work, if any, including sales tax, if any, and is submitted by Principal to Owner in connection with a Proposal in according to the terms of the Proposal and Bid Documents for:

EASTRIDGE HOUSE FIRE MONITORING SYSTEM UPGRADE

NOW THEREFORE:

- a. If Principal requests, in writing, to withdraw its Bid, prior to Bid Opening, or
- b. If the Proposal is rejected by Owner, or
- c. Owner in accordance with the terms of the Proposal and furnishes a bond for the faithful performance of said Project and for the payment of all persons performing labor or furnishing materials in connection therewith, with Surety or Sureties approved by Owner,

then this Bid Security shall be released; otherwise it shall remain in full force and effect and Principal shall forfeit the Bid Deposit or Surety shall immediately pay and forfeit to Owner the amount of the Bid Bond, as penalty and liquidated damages.

The obligations of Surety and its Bid Bond shall be in no way impaired or affected by any extension of time within which Owner may accept bids; and Surety does hereby waive notice of any such extension.

Bidding Contractor's Company Name: _____ Initials: _____



**KCHA – EASTRIDGE HOUSE FIRE MONITORING SYSTEM UPGRADE
CAPITAL CONSTRUCTION DEPARTMENT**

SIGNED AND DATED THIS _____ Day of _____, 20 _____.

ATTEST to Principal’s Signature:

PRINCIPAL (Print Company Name)

Signature of Authorized Official

Printed Name

Title (Please Print)

Corporate Seal (if Applicable)

Signature

Printed Name

Title (Please Print)

ATTEST to Surety’s Signature:

SURETY (Print Company Name)

Signature of Authorized Official

Printed Name

Title (Please Print)

Corporate Seal (if Applicable)

Signature

Printed Name

Title (Please Print)

The above is Attorney in Fact:

Yes No
(If Yes, attach Power of Attorney)

Local Office of Agent and / or Surety Company (please print):

Name: _____

Street Address: _____

City, State, Zip: _____

Power of Attorney of person signing for Surety Company must be attached to this Bond Form.

Surety Companies executing Bonds must appear on the current Authorized Insurance List in the State of Washington.

Bidding Contractor’s Company Name: _____ Initials: _____



DEBARMENT / SUSPENSION COMPLIANCE CERTIFICATION
RETURN EACH FORM SINGLE SIDED

The Bidder certifies to the best of its knowledge and belief, that it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency;
2. Have not within a three (3) -year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state, or local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and
4. Have not within a three-year period preceding this application/proposal had one or more public transactions (federal, state or local) terminated for cause or default.

BIDDING COMPANY

Company Name

Physical Street Address

City / State / Zip

Print Name of Authorized Official

Title

Signature of Authorized Official

Date

SUBSCRIBED AND SWORN to before me:

this _____ day of _____, 20 _____

(Signature)

(Print Name)

My Commission Expires: _____, 20 _____

Bidding Contractor's Company Name: _____ Initials: _____



KCHA – EASTRIDGE HOUSE FIRE MONITORING SYSTEM UPGRADE
CAPITAL CONSTRUCTION DEPARTMENT

SUBCONTRACTOR – FIRST TIER – LISTING – RETURN EACH FORM SINGLE SIDED

NAME OF BIDDING COMPANY: _____

PHYSICAL STREET ADDRESS: _____

CITY / STATE / ZIP: _____

1. List Approximate Percent (%) of Work Your Company will actually Perform: _____

2. Do You Intend on using Subcontractor(s) for this Project? Yes No

3. (If Yes, you must show on this form the name and information of All First Tier Subcontractors performing work that will be associated with this Bid.) Attach additional sheets if necessary. This form needs to be completed to the best of the Bidder’s ability at time of bid. If Bidder is Awarded Contract a final subcontractor list will be submitted prior to Notice to Proceed. **PRINT ALL INFORMATION**

SUBCONTRACTOR – FIRST TIER - LIST

Business Name: _____ Trade: _____
Address: _____ Contact: _____
Phone: _____ Years of Experience: _____
UBI No.: _____

Business Name: _____ Trade: _____
Address: _____ Contact: _____
Phone: _____ Years of Experience: _____
UBI No.: _____

Business Name: _____ Trade: _____
Address: _____ Contact: _____
Phone: _____ Years of Experience: _____
UBI No.: _____

Business Name: _____ Trade: _____
Address: _____ Contact: _____
Phone: _____ Years of Experience: _____
UBI No.: _____

The Bidder hereby certifies that the information contained in this Proposed Subcontractor List, including any attached sheets, is accurate, complete, and current:

Print Name of Authorized Official Title

Signature Date

Bidding Contractor’s Company Name: _____ Initials: _____



SECTION 3 – BUSINESS CERTIFICATION RETURN FORM SINGLE SIDED

THIS FORM MUST BE SIGNED AND RETURNED

Project Name: _____

Company Name: _____

Address: _____

Contact Name: _____ Contact Title: _____

Contact Phone: _____ Contact Email: _____

Type of Trade or Business: _____

Current Number of Regular, Full Time Employees (Puget Sound Region): _____

1. Have over **75 percent** of the labor hours performed for your business over the prior three-month period been performed by Section 3 workers?

Yes No **If “yes” is checked, submit the section 3 Individual Certification form(s) for all the regular, full-time employees (Puget Sound Region).**

2. Is **51% or more** of your business owned and controlled by low- or very low-income persons (persons who earn 80% or less of the median income level for the past 12 months - see attached income guidelines)?

Yes No **If “yes” is checked, submit either the section 3 Individual Certification form(s) or the Section 3 Subcontractor Business Work Plan form.**

3. Does your business provide economic opportunities for KCHA residents at the site(s) where the work will take place?

Yes No **If “yes” is checked, please provide supporting documentation.**

4. Does your business provide economic opportunities for residents of other KCHA developments or Section-8 assisted housing managed by KCHA?

Yes No **If “yes” is checked, please provide supporting documentation.**

5. Does your business provide economic opportunities to Section 3 workers residing within the metropolitan area (Puget Sound Region)?

Yes No **If “yes” is checked, please provide supporting documentation.**



I certify, under penalty of perjury, that my company Is Is Not a Section 3 Business.

I further certify that, **if my company is awarded the bid, and needs to hire additional employees for the project**, we will carry out Section 3 hiring, training and subcontracting requirements to the best of our ability.

_____ Signature	_____ Name
_____ Title	_____ Date
_____ Phone Number	_____ Email Address

If you have more specific questions about Section 3 requirements, contact KCHA at section3@kcha.org.

SECTION 3 – 2022 INCOME GUIDELINES

Location	Income Limit 1 person		
	Extremely Low Income	Very Low Income	Low Income
Kitsap County (Bremerton, Silverdale)	\$21,600	\$36,050	\$57,650
King/ Snohomish Counties (Seattle, Bellevue, Everett)	\$27,200	\$45,300	\$66,750
Pierce County (Tacoma)	\$21,350	\$35,550	\$56,850
Skagit County (Sedro-Woolley)	\$18,100	\$30,150	\$48,250
Thurston County (Olympia, Tumwater)	\$21,200	\$35,350	\$56,500



SECTION 3 – SUBCONTRACTOR WORK PLAN RETURN FORM SINGLE SIDED

RETURN THIS FORM WITH THE BID ***IF:***
CLAIMING **YES** TO QUESTION **3** or **4** on the SECTION 3 BUSINESS CERTIFICATION FORM

Project Name: _____

Company Name: _____

Address: _____

Contact Name: _____ Contact Title: _____

Contact Phone: _____ Contact Email: _____

SECTION 3 BUSINESS CONCERN			SUBCONTRACTED TASK(S)	SUBCONTRACT AMOUNT	% OF OVERALL CONTRACT
1.	Subcontractor's Name:				
	Subcontractor's Address:				
	Subcontractor's Phone No.:				
2.	Subcontractor's Name:				
	Subcontractor's Address:				
	Subcontractor's Phone No.:				
3.	Subcontractor's Name:				
	Subcontractor's Address:				
	Subcontractor's Phone No.:				
4.	Subcontractor's Name:				
	Subcontractor's Address:				
	Subcontractor's Phone No.:				

TOTAL CONTRACT VALUE: _____ **TOTAL SUBCONTRACT VALUE:** _____

PERCENTAGE OF TOTAL BID: _____

For a list of Section 3 Certified Businesses, please go to:
<https://portalapps.hud.gov/Sec3BusReg/BRegistry/SearchBusiness>



**SUMMARY OF HARASSMENT AND DISCRIMINATION
RETURN EACH FORM SINGLE SIDED**

KCHA prohibits harassment and discrimination based on race, color, national origin, citizenship status, creed, religion, sex, age, marital or veteran’s status, physical or mental disability, sexual orientation, political ideology, or any other basis protected by law (“protected status”). This policy applies to KCHA’s employees, vendors, contractors, visitors and others who conduct business with KCHA. The following are examples of prohibited conduct. This list is not exclusive; employees should see KCHA’s Personnel Policies and Procedures for more details and vendors/contractors should contact the Human Resources Department for more details:

- Unwelcome conduct based on protected status when sufficiently severe or pervasive to create a hostile work environment; or a supervisor’s improper conduct results in a tangible change in an employee’s status or benefits (demotion, termination, etc.).
- Unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature when (1) submission to such conduct is made an implicit or explicit condition of employment; (2) submission to or rejection of such conduct affects employment opportunities or decisions; or (3) such conduct interferes with an employee’s work or creates an intimidating, hostile or offensive work environment.
- Sexually suggestive or racially derogatory words, pictures, videos, cartoons, emails, etc.
- Leering, staring in a sexually suggestive manner or making offensive remarks about looks, clothing, or body.
- Touching in a way that may make an individual feel uncomfortable, such as patting, pinching or intentional brushing against another’s body.
- Gestures, pictures or drawings which would offend a particular racial or ethnic group or other protected class.
- Comments about an individual’s skin color, accent, or other racial/ethnic characteristics.
- Disparaging remarks or stereotypes about an individual’s gender, race, birthplace, ethnicity or ancestry.
- Negative comments about an individual’s religious beliefs (or lack of religious beliefs).
- Negative comments regarding an individual’s age if age 40 and over.
- Derogatory or intimidating references to an employee’s mental or physical impairment.

Anyone who has been harassed and/or discriminated against is expected to promptly report the alleged incident(s) to the Supervisor, Department Director, Director of Human Resources, Deputy Executive Director/Chief Administrative Officer or the Executive Director. KCHA will protect the confidentiality of such complaints to the extent possible. Complaints will be promptly, thoroughly and impartially investigated and KCHA will take immediate and appropriate corrective action when it determines that harassment has occurred. Individuals who make complaints or provide information related to complaints will be protected from retaliation.

The Bidder hereby certifies that the information contained above is understood and agreed upon.

Bidder’s Company Name: _____

Print Name of Authorized Official

Title

Signature

Date

Bidding Contractor’s Company Name: _____ Initials: _____



KCHA – EASTRIDGE HOUSE FIRE MONITORING SYSTEM UPGRADE
CAPITAL CONSTRUCTION DEPARTMENT

WMBE SURVEY – RETURN EACH FORM SINGLE SIDED

PLEASE COMPLETE THIS SURVEY AND RETURN WITH YOUR BID / PROPOSAL DOCUMENTS.
NOT SUBMITTING THIS SURVEY WILL NOT DISQUALIFY YOUR BID/PROPOSAL.
THIS IS FOR INFORMATIONAL PURPOSES ONLY.

Bidding Company Name: _____
Address: _____
City / State / Zip: _____

Type of Business: _____ Incorporated – Federal ID#: _____
_____ Sole Proprietorship – SS#: _____
_____ Other – Describe: _____

WMBE: _____ Yes _____ No
Describe: _____ Disadvantage Owned (Disabled – DBE)
_____ Women Owned (WBE)
_____ Minority Owned (MBE or MWBE) (Check Applicable)
_____ 1. White American _____ 4. Hispanic American
_____ 2. Black American _____ 5. Asian – Pacific American
_____ 3. Native American _____ 6. Hasidic Jew

Registered WMBE: _____ Yes _____ No _____ Registration in Progress

Authorized Signer _____ Print Name and Title _____ Date _____

FOR KCHA USE ONLY: IF THIS COMPANY HAS BEEN AWARDED THE CONTRACT, FORWARD THIS FORM

**TO: Tim Baker – KCHA Senior Management Analyst
Phone: 206-574-1111 Email: timb@kcha.org**

Bidding Contractor's Company Name: _____ Initials: _____



CONTRACTOR’S SUPPLIED SCHEDULE – RETURN EACH FORM SINGLE SIDED

- A. Gantt-Chart Schedule: Submit to the Owner a comprehensive, fully developed, horizontal Gantt-chart-type, Contractor's Final Master Project Schedule within fourteen (14) days of date after Letter of Award. Base schedule on the Preliminary Master Project Schedule and whatever updating and feedback was received since the start of Project. The Gantt-Chart Final Master Project Schedule can be either in MS Project or equivalent format.
- 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 (3) months or longer to complete, indicate an estimated completion percentage in ten (10%) percent increments within time bar.
- C. Contractor's Final Master Project Schedule Updating: At two (2) week intervals, update schedule to reflect actual construction progress and activities. Issue schedule three (3) days 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 Actual Completion percentage for each activity.

**CONTRACTOR
TO INSERT
PRELIMINARY
MASTER PROJECT
SCHEDULE HERE
MUST BE IN
MICROSOFT PROJECT,
PRIMAVERA or SIMILAR**

Bidding Contractor’s Company Name: _____ Initials: _____



BB - SECTION

NO PARTICIPATION for Bid Package

BB.1 No Participation Form



NO PARTICIPATION RESPONSE FORM

IF YOU CHOOSE NOT TO BID ON THIS PROJECT
RETURN ONLY THIS FORM PRIOR TO THE BID DUE DATE.

(NOT RETURNING THIS DOCUMENT COULD RESULT IN YOUR NAME BEING REMOVED FROM FURTHER KCHA SOLICITATIONS.)

BID DUE DATE: May 17, 2023
PROJECT NAME: Eastridge house Fire Monitoring System Upgrade
RETURN FORM TO: donaldh@kcha.org

****NOTE: Contractors have the option to mail in the No Participation Response Form, but this form must be received by the deadline of 1:00PM. KCHA does not recommend mailing in this form due to possible complications or difficulties that may arise with the mail delivery.**

If using the mail please return the form to: KING COUNTY HOUSING AUTHORITY
ATTN: Don Hatfield, Project Manager
700 Andover Park West, Suite C
Tukwila, WA 98188

1. My Company is NOT BIDDING on this Contract because: (check all response(s) that apply:

- Does not perform the requested type of work
- Has other work which would interfere with the proposed work schedule
- Job is too big
- Job is too small
- Can't meet the bonding and/or insurance requirements
- The documents were not received in time to prepare a bid
- The specifications were not clear. Please describe:

Other:

2. I would have Bid on this Contract if:

COMPANY NAME: _____

ADDRESS: _____

CITY-STATE-ZIP _____

SIGNATURE: _____
PRINCIPAL OR OFFICER DATE



C - SECTION

CONTRACT DOCUMENTS for Bid Package

- C.1 Construction Contract and General Conditions – Sample Template
- C.2 Performance and Payment Bond with Directions (for projects \$35,000 & over)
- C.3 Certificate as to Corporate Principal (If Performance & Payment Bonds are required)
- C.4 Instructions to Bidders for Insurance Requirements
- C.5 Site Specific Safety Plan – List of Plan Requirements
- C.6 Subcontractor Verification
- C.7 Certification of Payments to Influence Federal Transactions (for all subcontracts \$100,000 & over)
- C.8 Disclosure of Lobbying Activities (for all subcontracts \$100,000 & over)
- C.9 Certification of Compliance with Washington State Wage Payment Statutes
- C.10 Vendor Set Up Form
- C.11 Final Affidavits of Amounts Paid – Contractors
- C.12 Section 3 Individual Certification Form and FAQ's
- C.13 Section 3 Labor Hours Benchmark Status Report – Sample Template

If selected, the documents that are numbered 2 through 9 will need to be submitted prior to the "Notice of Award" along with a copy of the completed Statement of Intent to Pay Prevailing Wages that you have filed with the Washington State Department of Labor and Industries.



CONSTRUCTION CONTRACT / GENERAL CONDITION SAMPLES

**PLEASE SEE ATTACHED
AIA DOCUMENTS**

DRAFT AIA® Document A101™ – 2017

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

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

CONTRACT NUMBER:

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

KING COUNTY HOUSING AUTHORITY
600 Andover Park West
Tukwila, Washington 98188

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

NAME OF CONTRACTOR
Street Address
City, State Zip

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

NAME OF SITE
Street Address
City, State Zip
PROJECT NAME:

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

NAME OF ARCHITECT OR ENGINEER
Street Address
City, State Zip

The Owner and Contractor agree as follows.

In consideration of the mutual covenants and agreements herein contained, the Contractor agrees to furnish all labor, material, tools, equipment, and other items necessary to perform and complete all work described in the contract documents. This agreement includes Owner Directed Work Items. The Owner Directed Work Items may or may not be completed under this agreement. If the Owner elects to exclude any or all Owner Directed Work Items, an adjustment shall be made to this Agreement.

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

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

AIA Document A201™-2017, General Conditions of the Contract for Construction, is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

{426/612.052/02533546-2}
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TABLE OF ARTICLES

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

ARTICLE 1 THE CONTRACT DOCUMENTS

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

ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others. The Contractor shall comply with the Detailed Summary of the Scope of Work per **Exhibit A**.

ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be:
(Check one of the following boxes.)

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

§ 3.2 The Contract Time shall be measured from the date of commencement of the Work, as indicated in the **Notice to Proceed**.

§ 3.3 Substantial Completion

§ 3.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall achieve Substantial Completion of the entire Work no later than the date stipulated in the **Notice to Proceed**.

Portion of Work	Dates
Contract – Start Date	Month, Day, Year
Construction Period	Month, Day, Year to Month, Day, Year
Substantial Completion Date	Month, Day, Year
Physical Completion Date	Month, Day, Year (Liquidated Damages Start)
Contract – Final Completion Date	Month, Day, Year

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

ARTICLE 4 CONTRACT SUM

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

§ 4.2 Alternates

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

Alternate Number and Description	Price
<input type="text"/>	<input type="text"/>

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

Item	Price	Conditions for Acceptance
NA	<input type="text"/>	<input type="text"/>

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

Allowance Description	Price
Owner’s Contingency	<input type="text"/>

§ 4.4 Unit prices, if any:

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

Unit prices will be used for unforeseen conditions where small quantities are needed. An unforeseen condition requiring large quantities resulting in a substantial change in the scope of work will not be considered applicable for unit pricing. Large deviations in the Scope of Work will be evaluated and addressed through a change order process as stipulated in the Contract Documents.

Unit Item Description	Price per Unit (\$0.00)
<input type="text"/>	<input type="text"/>

§ 4.5 Liquidated damages, if any:

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

Timely performance and completion of the Work is essential to the Owner and Time limits stated in the Agreement are of the essence. Owner will incur serious and substantial damages if Substantial Completion of the Work or Contract Completion of the entire project does not occur in the time limits defined in the Agreement. Liquidated Damages will not be assessed as a penalty, but as Liquidated Damages for breach of contract. The amount is fixed and agreed upon by the Contractor and Owner due to the extreme difficulty and impracticability of fixing and ascertaining the actual damages the Owner would sustain. This amount is construed as an actual amount of damages to the Owner and may be retained by the Owner and deducted from any payment to the Contractor for obligations in the Agreement. If different and separate completion dates are stated in the Agreement for separate parts or stages of the Work, the amount of Liquidated Damages shall apply and may be assessed on those parts or those stages of the Work which are delayed. The Owner therefore may impose and assess Liquidated Damages in the following amount **per calendar day**:

§ 4.6 Other:

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

NA

ARTICLE 5 PAYMENTS**§ 5.1 Progress Payments**

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

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

NA

§ 5.1.3 Provided that an Application for Payment is received by the Owner not later than the **25th** day of a month, the Owner shall make payment of the amount certified to the Contractor not later than the **25th** day of the **following** month.

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

§ 5.1.3.1 Applications for Payment may be delayed by Owner should any criteria listed in A201™-2017 General Conditions Section 9.5.1 be evident or if the As-Built Documents have not been updated per Division 01 10 10 Scope of Work Section 2.0.B.6.

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

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

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

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

- .1 That portion of the Contract Sum properly allocable to completed Work;
- .2 That portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction, or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing.; and

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

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

§ 5.1.6.3 The General Contractor Certification upon the Application for Payment form, per **Exhibit B will accompany each Application for Payment**. By submitting an Application for Payment, the Contractor certifies, agrees and warrants to the Owner as follows:

.1 The Contractor has made full payment to all laborers, subcontractors and suppliers of material and equipment whose charges were included in any prior Application for Payment, subject only to (a) retainage at the contract rate, and (b) the matters set forth below or on an attachment hereto.

.2 The Contractor knows of no one making a claim for payment other than those included in the current Application for Payment, who will be paid when the current Application for Payment is paid by the Owner, except as noted below or on an attachment hereto.

.3 In consideration of payments made by the Owner, the Contractor hereby waives and releases any and all claims and demands against Owner and the Project for all periods up to and including the period covered by this Application for Payment, subject only to (a) receipt of payment of the current Application, (b) applicable retainage, and (c) the matters set forth below or on an attachment hereto.

§ 5.1.7 Retainage

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

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

«Five Percent » « 5% »

§ 5.1.7.1.1 The following items are not subject to retainage:

(Insert any items not subject to the withholding of retainage, such as general conditions, insurance, etc.)

« NA »

§ 5.1.7.2 Reduction or limitation of retainage, if any, shall be as follows:

(If the retainage established in Section 5.1.7.1 is to be modified prior to Substantial Completion of the entire Work, including modifications for Substantial Completion of portions of the Work as provided in Section 3.3.2, insert provisions for such modifications.)

« NA »

§ 5.1.7.3 Retainage shall be held at the rate stated in § 5.1.7.1 for the duration of the project. There shall be no reduction or limitation of retainage. There shall also be no early release of retainage by the Owner to the Contractor. The Owner must obtain all releases in relation to Contractor Compliance from the Washington State Department of Revenue, the Washington State Department of Labor and Industries, and the Washington State Department of Employment Security prior to any release of retention by the Owner to the Contractor.

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

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

§ 5.2 Final Payment

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

- .1 the Contractor has fully performed the Contract except for the Contractor’s responsibility to correct Work as provided in Article 12 of AIA Document A201–2017, and to satisfy other requirements, if any, which extend beyond final payment; and
- .2 a final Application for Payment has been approved by the Owner;
- .3 verification of final Affidavits of Wages Paid (L&I) is provided by the Contractor to the Owner;
- .4 final Review and Approval of all Certified Payroll Documents for all Prevailing Wages.

§ 5.2.2 The Owner's final payment to the Contractor shall be made no later than 30 days after the Owner's approval of the Final Application for Payment,

ARTICLE 6 DISPUTE RESOLUTION

§ 6.1 Any claim between the Owner and Contractor shall be resolved in accordance with the provisions set forth in Article 15 of AIA Document A201-2017.

ARTICLE 7 TERMINATION OR SUSPENSION

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

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

ARTICLE 8 MISCELLANEOUS PROVISIONS

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

§ 8.2 The Owner's representative:
(Name, address, email address, and other information)

Nikki Parrott, Director of Capital Construction & Weatherization
«», Project Manager
«», Construction Coordinator
«», Project Engineer

§ 8.3 The Contractor's representative:
(Name, address, email address, and other information)

«», President

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

§ 8.5 Insurance and Bonds

§ 8.5.1 The Contractor shall purchase and maintain insurance as set forth in AIA Document A101™-2017, Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum.

Type of insurance or bond

Limit of liability or bond amount (\$0.00)

Certificate of Liability Insurance Requirements:	Limit	(Exhibit - C)
Builders Risk Insurance:	Coverage	(Exhibit - C)
Performance and Payment Bond:	Completed Value of Project	(Exhibit - C)
	Gross Contract Amount	100%

§ 8.6 Other provisions:

§ 8.6.1 Section 3: Instruction, Requirements and Income Guidelines

§ 8.6.1.1 The Contractor shall comply with all requirements of the Section 3 Program for Economic Opportunities providing to the greatest extent possible, job training, employment and contract opportunities for low and very low income residents including persons who are recipients of HUD assistance for housing, with preference for both targeted workers living in the service area or neighborhood of the Development and Youthbuild participants, as defined at 24 CFR Part 75 per Exhibit D.1-D.3 and as designated in AIA A201-2017, Section 18 of the General Conditions.

§ 8.6.2 Davis-Bacon / HUD Non-Routine Maintenance / State Prevailing Wage Certified Payroll

§ 8.6.2.1 The Contractor shall comply with requirements and regulations of the Davis-Bacon Act per E.0 & E.1.

.1 Payment of Wages to Workers shall be weekly.

- .2 Certified Payroll Reports recording wages paid to each worker will be submitted to the Owner weekly.
- .3 Failure to submit weekly Certified Payroll Reports or errors in payroll reports for the Contractor and any and all Subcontractors, and any Lower Tier Subcontractors will be cause for the Owner to suspend or delay Contract Progress Payments.
- .4 The Owner shall withhold progress payments until all issues regarding full compliance with the submission of Certified Payroll Reports are resolved to the complete and full satisfaction of the Owner.
- .5 The Contractor is required and shall perform a complete review of all Certified Payroll Reports including those of the Contractor, and all Subcontractors and any and all Lower Tier Subcontractors prior to the submission of the reports by the Contractor to the Owner.

.6 The Wage Decision for this project is:

(Check one of the following boxes.)

Davis-Bacon

Construction Type <>> Decision No. <>> Modification No. <>>, Date <>>

HUD Non-Routine Maintenance

Date <>>

WA State Prevailing

Effective Date <>> County <>>

§ 8.6.3 Prevailing Wage Exemption

§ 8.6.3.1 For all contracts with a Bid Date of **May 15, 2011** or later:

- .1 When a Contractor claims an exemption from State Prevailing Wage Requirements on HUD Projects, the Contractor and all Subcontractors and all tiers must file an Intent and Affidavit with the Washington State Department of Labor and Industries for that project.
- .2 The Statement of Intent must also include an Exemption Claim stating that the project is exempt from the payment of State Prevailing Wage Rates based on the Housing Act of 1937 and 24CFR 965.101 and further stating that all workers will be paid in accordance with the requirements of the Davis-Bacon Wage Requirements, per **Exhibit E.2**.
- .3 Pursuant to RCW 39.12.040, the Owner will not make any payments to a Contractor who has not submitted an Intent Form that has been approved by the Washington State Department of Labor and Industries Industrial Statistician, or release funds retained until the Contractor and all subcontractors have submitted Affidavit forms that have been certified by the Industrial Statistician.

ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS

§ 9.1 This Agreement is comprised of the following documents:

- .1 AIA Document A101™–2017, Standard Form of Agreement Between Owner and Contractor
- .2 AIA Document A201™–2017, General Conditions of the Contract for Construction
- .3 Drawings

Number	Title	Date
Refer to Exhibit F	Drawings Table of Contents	

- .4 Specifications

Section	Title	Date	Pages
Refer to Exhibit G	Specifications Table of Contents		

- .5 Addenda, if any:

Number	Date	Pages

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

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

Bid Documents

.1	Contractor's Bid Documents	Exhibit H
.2	Contractor's Company COVID – 19 Protection Protocols	Exhibit I
.3	Contractor's Site Specific COVID- 19 Safety Plan	Exhibit J



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

KING COUNTY HOUSING AUTHORITY

XXX CONSTRUCTION COMPANY

OWNER (Signature)

 Name (Print)

 Title (Print)

CONTRACTOR (Signature)

 Name (Print)

 Title (Print)

Contractor's License No.: <<>>

EXHIBIT OVERVIEW:

DESCRIPTION	CROSS REFERENCE
Exhibit – A Detailed Summary of Scope of Work	Contractor Scope of Work Article 2
Exhibit – B Application for Payment	GC Certification 5.1.6.3
Exhibit – C Insurance Requirements	Limits 8.5.1
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Exhibit – E.2 Prevailing Wage Exemption	Statement of Intent 8.6.3.1
Exhibit – F Drawings	Table of Contents 9.1.3
Exhibit – G Specifications	Table of Contents 9.1.4
Exhibit – H Contractor's Bid Documents	Contractor's Bid Documents 9.1.6.1
Exhibit – I Contractor's Company COVID-19 Protection Protocols	9.1.6.2
Exhibit – J Contractor's Site Specific COVID-19 Safety Plan	9.1.6.3

DRAFT AIA® Document A201™ – 2017

General Conditions of the Contract for Construction

CONTRACT NUMBER:

for the following PROJECT:

(Name and location or address)

NAME OF SITE

Street Address

City, State Zip

PROJECT NAME:

THE OWNER:

(Name, legal status and address)

KING COUNTY HOUSING AUTHORITY

600 Andover Park West

Tukwila, Washington 98188

THE CONTRACTOR:

(Name, legal status and address)

CONTRACTOR'S NAME

Address

City, State Zip

THE ARCHITECT and/or THE ENGINEER:

(Name, legal status and address)

ARCHITECT/ENGINEER NAME

Address

City, State Zip

ADDITIONS AND DELETIONS:

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

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

For guidance in modifying this document to include supplementary conditions, see AIA Document A503™, Guide for Supplementary Conditions.

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ARTICLE 1 GENERAL PROVISIONS

§ 1.1 Basic Definitions

§ 1.1.1 The Contract Documents

The Contract Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter the Agreement) and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement, and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive, or (4) a written order for a minor change in the Work issued by the Owner. Unless specifically enumerated in the Agreement, the Contract Documents do not include the advertisement or invitation to bid, Instructions to Bidders, sample forms, other information furnished by the Owner in anticipation of receiving bids or proposals, the Contractor's bid or proposal, or portions of Addenda relating to bidding or proposal requirements.

§ 1.1.2 The Contract

The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect or the Architect's consultants, (2) between the Owner and a Subcontractor or a Sub-subcontractor, (3) between the Owner and the Architect or the Architect's consultants, or (4) between any persons or entities other than the Owner and the Contractor. The Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Architect's duties.

§ 1.1.3 The Work

The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

§ 1.1.4 The Project

The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by the Owner and by Separate Contractors.

§ 1.1.5 The Drawings

The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.

§ 1.1.6 The Specifications

The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.

§ 1.1.7 Instruments of Service

Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect's consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

§ 1.2 Correlation and Intent of the Contract Documents

§ 1.2.1 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

§ 1.2.1.1 The invalidity of any provision of the Contract Documents shall not invalidate the Contract or its remaining provisions. If it is determined that any provision of the Contract Documents violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case the Contract Documents shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Contract.

§ 1.2.2 Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

§ 1.2.3 Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

§ 1.3 Capitalization

Terms capitalized in these General Conditions include those that are (1) specifically defined, (2) the titles of numbered articles, or (3) the titles of other documents published by the American Institute of Architects.

§ 1.4 Interpretation

In the interest of brevity the Contract Documents frequently omit modifying words such as “all” and “any” and articles such as “the” and “an,” but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

§ 1.5 Ownership and Use of Drawings, Specifications, and Other Instruments of Service

§ 1.5.1 The Architect and the Architect’s consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and retain all common law, statutory, and other reserved rights in their Instruments of Service, including copyrights. The Contractor, Subcontractors, Sub-subcontractors, and suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Architect’s or Architect’s consultants’ reserved rights.

§ 1.5.2 The Contractor, Subcontractors, Sub-subcontractors, and suppliers are authorized to use and reproduce the Instruments of Service provided to them, solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and suppliers may not use the Instruments of Service on other projects or for additions to the Project outside the scope of the Work without the specific written consent of the Owner.

§ 1.6 Notice

§ 1.6.1 Except as otherwise provided in Section 1.6.2, where the Contract Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission.

§ 1.6.2 Notice of Claims as provided in Section 15.1.3 shall be provided in writing and shall be deemed to have been duly served only if delivered to the designated representative of the party to whom the notice is addressed by certified or registered mail, or by courier providing proof of delivery.

§ 1.7 Digital Data Use and Transmission

If the parties intend to transmit Instruments of Service or any other information or documentation in digital form, they shall endeavor to establish necessary protocols governing such transmissions, unless otherwise already provided in the Agreement or the Contract Documents.

ARTICLE 2 OWNER

§ 2.1 General

§ 2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner’s approval or authorization. Except as otherwise provided in Section 4.2.1, the Architect does not have such authority. The term “Owner” means the Owner or the Owner’s authorized representative.

§ 2.1.2 The Owner shall furnish to the Contractor, within fifteen days after receipt of a written request, information necessary and relevant for the Contractor to evaluate, give notice of, or enforce mechanic’s lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner’s interest therein.

§ 2.2 Evidence of the Owner's Financial Arrangements

§ 2.2.1 For the purposes of this Agreement the Owner has provided sufficient and adequate funding for this project. The Contractor may only request such evidence if (1) the Owner fails to make payments to the Contractor as the Contract Documents require; (2) a change in the Work materially changes the Contract Sum; or (3) the Contractor identifies in writing a reasonable concern regarding the Owner's ability to make payment when due. The Owner shall furnish such evidence as a condition precedent to commencement or continuation of the Work or the portion of the Work affected by a material change.

§ 2.3 Information and Services Required of the Owner

§ 2.3.1 Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities.

§ 2.3.2 The Owner may retain an architect lawfully licensed to practice architecture, or an entity lawfully practicing architecture, in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number.

§ 2.3.5 The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.

§ 2.3.6 The Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Contractor's performance of the Work with reasonable promptness after receiving the Contractor's written request for such information or services.

§ 2.3.6 Unless otherwise provided in the Contract Documents, the Owner shall furnish to the Contractor one copy of the Contract Documents for purposes of making reproductions pursuant to Section 1.5.2.

§ 2.4 Owner's Right to Stop the Work

If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or repeatedly fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Section 6.1.3.

§ 2.5 Owner's Right to Carry Out the Work

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a ten-day period after receipt of notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such default or neglect. In such case an appropriate Change Order shall be issued deducting from payments then or thereafter due the Contractor for the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the additional professional design services made necessary by such default, neglect, or failure. If current and future payments are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. If the Contractor disagrees with the actions of the Owner or the professional design services, or the amounts claimed as costs to the Owner, the Contractor may file a Claim pursuant to Article 15.

ARTICLE 3 CONTRACTOR

§ 3.1 General

§ 3.1.1 The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all matters under this Contract. The term "Contractor" means the Contractor or the Contractor's authorized representative.

§ 3.1.2 The Contractor shall perform the Work in accordance with the Contract Documents.

§ 3.1.3 The Contractor shall not be relieved of its obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect in the Owners's administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor.

§ 3.1.4 Progress Meetings. The Contractor shall schedule and conduct meetings with the Owner and as determined by the Owner with the Architect also present, to discuss such matters as procedures, progress, coordination, and the Final Project Schedules. The Contractor shall prepare, record, and promptly distribute minutes of each progress meeting to each attendee and identified stakeholders. The Contractor shall also provide a short-term look-ahead schedule for presentation and review at each progress meeting. The short-term schedule shall be in sufficient detail to allow the Contractor and Owner to make any necessary schedule modifications to maintain the progress of the Work and for adherence to the time frames stipulated in the Agreement. The following shall also be included in the progress meeting agenda:

- .1 Coordination of architectural, structural, mechanical, electrical, civil work or any other item associated with the Work.
- .2 Measures to mitigate adverse effects of construction on the residents of the development during construction.
- .3 Resolving issues with governing agencies.
- .4 Status of submittals, RFI's, COR's and COR's.
- .5 Site safety and associated issues.
- .6 Segregated and comingled material recycling reports.
- .7 Section 3 compliance and status.

§ 3.2 Review of Contract Documents and Field Conditions by Contractor

§ 3.2.1 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become generally familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of the Contract Documents.

§ 3.2.2 Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Section 2.3.4, 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. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report to the Owner any errors, inconsistencies or omissions discovered by or made known to the Contractor as a request for information in such form as the Owner may require. It is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents.

- .1 If there is a discrepancy between Scope of Work, Specifications and/or Drawings, the Scope of Work shall take precedence followed by the Specifications and lastly the drawings.

§ 3.2.3 The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Owner any nonconformity discovered by or made known to the Contractor as a request for information in such form as the Owner may require.

§ 3.2.4 If the Contractor believes that additional cost or time is involved because of clarifications or instructions the Owner issues in response to the Contractor's notices or requests for information pursuant to Sections 3.2.2 or 3.2.3, the Contractor shall submit Claims as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.2 or 3.2.3, the Contractor shall pay such costs and damages to the Owner, subject to Section 15.1.7, as would have been avoided if the Contractor had performed such obligations. If the Contractor performs those obligations, the Contractor shall not be liable to the Owner for damages resulting from errors, inconsistencies or omissions in the Contract Documents, for differences between field measurements or conditions and the Contract Documents, or for nonconformities of the Contract Documents to applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities.

§ 3.3 Supervision and Construction Procedures

§ 3.3.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work under the Contract. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety thereof and shall be solely responsible for the jobsite safety of such means, methods, techniques, sequences, or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely notice to the Owner, and shall propose alternative means, methods, techniques, sequences, or procedures. The Owner shall evaluate the proposed alternative solely for conformance with the design intent for the completed construction. Unless the Owner objects to the Contractor's proposed alternative, the Contractor shall perform the Work using its alternative means, methods, techniques, sequences, or procedures and shall not proceed with that portion of the Work without further written instructions from the Owner. If the Contractor is then instructed to proceed with the required means, methods, techniques, sequences or procedures without acceptance of changes proposed by the Contractor, the Owner shall be solely responsible for any loss or damage arising solely from those Owner-required means, methods, techniques, sequences or procedures.

§ 3.3.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors.

§ 3.3.3 The Contractor shall be responsible for inspection of portions of Work already performed to determine that such portions are in proper condition to receive subsequent Work.

§ 3.4 Labor and Materials

§ 3.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

§ 3.4.2 Except in the case of minor changes in the Work authorized by the Owner in accordance with Section 3.12.8, the Contractor may make substitutions only with the consent of the Owner, and in accordance with a Change Order or Construction Change Directive.

§ 3.4.3 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them.

§ 3.5 Warranty

§ 3.5.1 The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality, new and in conformance with the Contract Documents unless the Contract Documents require or permit otherwise. 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. Work, materials, or equipment not conforming to these requirements may be considered defective. 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. If required by the Owner, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

§ 3.5.2 All material, equipment, or other special warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with Section 9.8.4.

§ 3.6 Taxes

The Contractor shall pay sales, consumer, use and similar taxes for the Work provided by the Contractor that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

§ 3.7 Permits, Fees, Notices and Compliance with Laws

§ 3.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay permits other than those acquired and paid by the Owners.

§ 3.7.2 The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work.

§ 3.7.3 If the Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction. The Contract shall provide the required tenant notices as directed by the Owner.

§ 3.7.4 Concealed or Unknown Conditions

If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the Owner before conditions are disturbed and in no event later than 14 days after first observance of the conditions. The Owner will promptly investigate such conditions and, if the Owner determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend that an equitable adjustment be made in the Contract Sum or Contract Time, or both. If the Owner determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Owner shall promptly notify the Contractor in writing, stating the reasons.

§ 3.7.5 If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall notify the Owner. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 15.

§ 3.8 Allowances

§ 3.8.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct.

§ 3.8.2 Unless otherwise provided in the Contract Documents,

- .1 allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- .2 Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit, and other expenses contemplated for stated allowance amounts shall be included in the allowances; and
- .3 whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 3.8.2.1 and (2) changes in Contractor's costs under Section 3.8.2.2.

§ 3.9 Superintendent

§ 3.9.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor.

§ 3.9.2 The Contractor, as soon as practicable after award of the Contract, shall confirm for the Owner of the name and qualifications of the superintendent as identified in the Bid Documents. Within 14 days of receipt of the information, the Owner may notify the Contractor, stating whether the Owner (1) has reasonable objection to the proposed superintendent or (2) requires additional time for review. Failure of the Owner to provide notice within the 14-day period shall constitute notice of no reasonable objection.

§ 3.9.3 The Contractor shall not employ a proposed superintendent to whom the Owner has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's consent, which shall not unreasonably be withheld or delayed.

§ 3.9.4 The Contractor's Superintendent(s) shall be physically present at the jobsite from daily commencement of work to daily completion of work. The site shall be managed daily without interruption. Daily commencement and daily completion are defined as the actual hours of operation for the project.

§ 3.10 Contractor's Construction and Submittal Schedules

§ 3.10.1 The Contractor, promptly after being awarded the Contract, shall submit for the Owner's information a Contractor's construction schedule for the Work. The schedule shall contain detail appropriate for the Project, including (1) the date of commencement of the Work, interim schedule milestone dates, and the date of Substantial Completion; (2) an apportionment of the Work by construction activity; and (3) the time required for completion of each portion of the Work. The schedule shall provide for the orderly progression of the Work to completion and shall not exceed time limits current under the Contract Documents. The schedule shall be revised at appropriate intervals as required by the conditions of the Work and Project.

§ 3.10.2 The Contractor, promptly after being awarded the Contract and thereafter as necessary to maintain a current submittal schedule, shall submit a submittal schedule for the Owner's approval. The Owner's approval shall not be unreasonably delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, and (2) allow the Owner reasonable time to review submittals. If the Contractor fails to submit a submittal schedule, or fails to provide submittals in accordance with the approved submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.

§ 3.10.3 The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner.

§ 3.11 Documents and Samples at the Site

The Contractor shall make available, at the Project site, the Contract Documents, including Change Orders, Construction Change Directives, and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and the approved Shop Drawings, Product Data, Samples, and similar required submittals. These shall be in electronic form or paper copy, available to the Owner, and delivered to the Owner upon completion of the Work as a record of the Work as constructed.

§ 3.12 Shop Drawings, Product Data and Samples

§ 3.12.1 Shop Drawings are drawings, diagrams, schedules, and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier, or distributor to illustrate some portion of the Work.

§ 3.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

§ 3.12.3 Samples are physical examples that illustrate materials, equipment, or workmanship, and establish standards by which the Work will be judged.

§ 3.12.4 Shop Drawings, Product Data, Samples, and similar submittals are not Contract Documents. Their purpose is to demonstrate how the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Architect is subject to the limitations of Section 4.2.7. Informational submittals upon which the Architect is not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Architect without action.

§ 3.12.5 The Contractor shall review for compliance with the Contract Documents, approve, and submit to the Owner, Shop Drawings, Product Data, Samples, and similar submittals required by the Contract Documents, in accordance with the submittal schedule approved by the Owner or, in the absence of an approved submittal

schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of Separate Contractors.

§ 3.12.6 By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Contractor represents to the Owner that the Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

§ 3.12.7 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples, or similar submittals, until the respective submittal has been approved by the Owner.

§ 3.12.8 The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from the requirements of the Contract Documents by the Owner's approval of Shop Drawings, Product Data, Samples, or similar submittals, unless the Contractor has specifically notified the Owner of such deviation at the time of submittal and (1) the Owner has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals, by the Owner's approval thereof.

§ 3.12.9 The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples, or similar submittals, to revisions other than those requested by the Owner on previous submittals. In the absence of such notice, the Owner's approval of a resubmission shall not apply to such revisions.

§ 3.12.10 The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures. The Contractor shall not be required to provide professional services in violation of applicable law.

§ 3.12.10.1 If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of the Contractor by the Contract Documents, the Owner will specify all performance and design criteria that such services must satisfy. The Contractor shall be entitled to rely upon the adequacy and accuracy of the performance and design criteria provided in the Contract Documents. The Contractor shall cause such services or certifications to be provided by an appropriately licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings, and other submittals prepared by such professional. Shop Drawings, and other submittals related to the Work, designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Owner. The Owner shall be entitled to rely upon the adequacy and accuracy of the services, certifications, and approvals performed or provided by such design professionals, provided the Owner has specified to the Contractor the performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Owner will review and approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.

§ 3.12.10.2 If the Contract Documents require the Contractor's design professional to certify that the Work has been performed in accordance with the design criteria, the Contractor shall furnish such certifications to the Architect at the time and in the form specified by the Architect.

§ 3.13 Use of Site

The Contractor shall confine operations at the site to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, lawful orders of public authorities, and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

§ 3.14 Cutting and Patching

§ 3.14.1 The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly. All areas requiring cutting, fitting, or patching shall be restored to the condition existing prior to the cutting, fitting, or patching, unless otherwise required by the Contract Documents.

§ 3.14.2 The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or Separate Contractors by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter construction by the Owner or a Separate Contractor except with written consent of the Owner and of the Separate Contractor. Consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold, from the Owner or a Separate Contractor, its consent to cutting or otherwise altering the Work.

§ 3.15 Cleaning Up

§ 3.15.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery, and surplus materials from and about the Project. Contractor to be in compliance with Section 6002 of the Solid Waste Disposal Act as amended by Resource Conservation & Recovery Act.

§ 3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and the Owner shall be entitled to reimbursement from the Contractor.

§ 3.16 Access to Work

The Contractor shall provide the Owner and Architect with access to the Work in preparation and progress wherever located.

§ 3.17 Royalties, Patents and Copyrights

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner harmless from loss on account thereof, but shall not be responsible for defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specifications, or other documents prepared by the Owner. However, if an infringement of a copyright or patent is discovered by, or made known to, the Contractor, the Contractor shall be responsible for the loss unless the information is promptly furnished to the Owner. Contractor is to be in compliance with the Right of Inventions Act (37 CFR Part 401).

§ 3.18 Indemnification

§ 3.18.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 3.18.

§ 3.18.2 In claims against any person or entity indemnified under this Section 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under Section 3.18.1 shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.

ARTICLE 4 ARCHITECT

§ 4.1 General

§ 4.1.1 The Architect is the person or entity retained by the Owner pursuant to Section 2.3.2 and identified as such in the Agreement.

§ 4.1.2 Duties, responsibilities, and limitations of authority of the Architect as set forth in the Contract Documents shall not be restricted, modified, or extended without written consent of the Owner, Contractor, and Architect. Consent shall not be unreasonably withheld.

§ 4.2 Administration of the Contract

§ 4.2.1 The Owner will provide administration of the Contract as described in the Contract Documents during construction until the date the Owner issues the final Certificate for Payment.

§ 4.2.2 The Owner will visit the site at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Owner will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The Owner will not have control over, charge of, or responsibility for the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents.

§ 4.2.3 On the basis of the site visits, the Owner will identify (1) known deviations from the Contract Documents, (2) known deviations from the most recent construction schedule submitted by the Contractor, and (3) defects and deficiencies observed in the Work. The Owner will not be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The Owner will not have control over or charge of, and will not be responsible for acts or omissions of, the Contractor, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.

§ 4.2.4 The Owner will conduct a mandatory pre-construction meeting with the Contractor. The meeting will include but is not limited to a review of the scope of work, project schedules, general requirements for construction work, jobsite security, staging and storage areas, material recycling and salvage, jobsite cleanup, and tests, samples and construction observation. The meeting will also include a review of the submittal process for applications for payment, the change order process, the process for progress payments, the final application for payment, and release of retention. A review of the Certified Payroll process will also be conducted. A separate Certified Payroll training session will be conducted by the Owner with the Contractor and with each subcontractor.

§ 4.2.5 A separate meeting will be also be conducted to review the Section 3 plan submitted by the Contractor and to review of the Section 3 reporting procedures.

§ 4.2.6 The Contractor shall contact the local jurisdiction to conduct a pre-construction conference with building officials and other local agencies as applicable for the project.

§ 4.2.4 Communications

Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized, the Owner and Contractor shall endeavor to communicate with each other directly about matters arising out of or relating to the Contract. Communications by and with the Architect's consultants shall be through the Owner. Communications by and with Subcontractors and suppliers shall be through the Contractor. Communications by and with Separate Contractors shall be through the Owner. The Contract Documents may specify other communication protocols.

§ 4.2.5 Based on the Owner's evaluations of the Contractor's Applications for Payment, the Owner will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.

§ 4.2.6 The Owner has authority to reject Work that does not conform to the Contract Documents. Whenever the Owner considers it necessary or advisable, the Owner will have authority to require inspection or testing of the Work in accordance with Sections 13.4.2 and 13.4.3, whether or not the Work is fabricated, installed or completed. However, neither this authority of the Owner nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Owner to the Contractor, Subcontractors, suppliers, their agents or employees, or other persons or entities performing portions of the Work.

§ 4.2.7 The Owner and/or Architect will review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data, and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Owner and/or Architect's action will be taken in accordance with the submittal schedule approved by the Owner or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Owner's professional judgment to permit adequate review. Review of such submittals is not conducted for the

purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Owner's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5, and 3.12. The Owner and/or Architect's review shall not constitute approval of safety precautions or of any construction means, methods, techniques, sequences, or procedures. The Owner's and/or Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

§ 4.2.8 The Owner will prepare Change Orders and Construction Change Directives, and may order minor changes in the Work as provided in Section 7.4. The Owner will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4.

§ 4.2.9 The Owner will conduct inspections to determine the date or dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion pursuant to Section 9.8; written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10; and issue a final Certificate for Payment pursuant to Section 9.10.

§ 4.2.11 The Owner will interpret and decide matters concerning performance under, and requirements of, the Contract Documents. The Owner's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness.

§ 4.2.12 Interpretations and decisions of the Owner will be consistent with the intent of, and reasonably inferable from, the Contract Documents and will be in writing or in the form of drawings..

§ 4.2.13 The Owner's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.

§ 4.2.14 The Owner will review and respond to requests for information about the Contract Documents. The Owner's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. If appropriate, the Architect will assist the Owner and respond to Requests For Information (RFI's) as directed by the Owner and will prepare and issue supplemental Drawings and Specifications in response to the Requests For Information.

ARTICLE 5 SUBCONTRACTORS

§ 5.1 Definitions

§ 5.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include a Separate Contractor or the subcontractors of a Separate Contractor.

§ 5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

§ 5.2 Award of Subcontracts and Other Contracts for Portions of the Work

§ 5.2.1 Unless otherwise stated in the Contract Documents, the Contractor, as soon as practicable after award of the Contract, shall confirm for the Owner of the persons or entities for each principal portion of the Work, including those who are to furnish materials or equipment fabricated to a special design as identified in the Bid Documents. Within 14 days of receipt of the information, the Owner may notify the Contractor whether the Owner (1) has reasonable objection to any such proposed person or entity or (2) requires additional time for review. Failure of the Owner to provide notice within the 14-day period shall constitute notice of no reasonable objection.

§ 5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection. The Contractor shall ensure that all and any Subcontractor(s) are not on any Debarment Lists and are Not Excluded from performing work on Federally Funded Projects. The Contractor shall provide written evidence of such to the Owner prior to the commencement of work.

§ 5.2.3 If the Owner has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner has no reasonable objection. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor's Work. However, no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.

§ 5.2.4 The Contractor shall not substitute a Subcontractor, person, or entity for one previously selected if the Owner makes reasonable objection to such substitution.

§ 5.3 Subcontractual Relations

By appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work that the Contractor, by these Contract Documents, assumes toward the Owner and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

§ 5.4 Contingent Assignment of Subcontracts

§ 5.4.1 Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner, provided that

- .1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Section 14.2 and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor; and
- .2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

When the Owner accepts the assignment of a subcontract agreement, the Owner assumes the Contractor's rights and obligations under the subcontract.

§ 5.4.2 Upon such assignment, if the Work has been suspended for more than 30 days, the Subcontractor's compensation shall be equitably adjusted for increases in cost resulting from the suspension.

§ 5.4.3 Upon assignment to the Owner under this Section 5.4, the Owner may further assign the subcontract to a successor contractor or other entity. If the Owner assigns the subcontract to a successor contractor or other entity, the Owner shall nevertheless remain legally responsible for all of the successor contractor's obligations under the subcontract.

ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

§ 6.1 Owner's Right to Perform Construction and to Award Separate Contracts

§ 6.1.1 The term "Separate Contractor(s)" shall mean other contractors retained by the Owner under separate agreements. The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and with Separate Contractors retained under Conditions of the Contract substantially similar to those of this Contract, including those provisions of the Conditions of the Contract related to insurance and waiver of subrogation.

§ 6.1.2 When separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term “Contractor” in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.

§ 6.1.3 The Owner shall provide for coordination of the activities of the Owner’s own forces and of each Separate Contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with any Separate Contractors and the Owner in reviewing their construction schedules. The Contractor shall make any revisions to its construction schedule deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Contractor, Separate Contractors, and the Owner until subsequently revised.

§ 6.1.4 Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner’s own forces or with Separate Contractors, the Owner or its Separate Contractors shall have the same obligations and rights that the Contractor has under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6, and Articles 10, 11, and 12.

§ 6.2 Mutual Responsibility

§ 6.2.1 The Contractor shall afford the Owner and Separate Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor’s construction and operations with theirs as required by the Contract Documents.

§ 6.2.2 If part of the Contractor’s Work depends for proper execution or results upon construction or operations by the Owner or a Separate Contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly notify the Owner of apparent discrepancies or defects in the construction or operations by the Owner or Separate Contractor that would render it unsuitable for proper execution and results of the Contractor’s Work. Failure of the Contractor to notify the Owner of apparent discrepancies or defects prior to proceeding with the Work shall constitute an acknowledgment that the Owner’s or Separate Contractor’s completed or partially completed construction is fit and proper to receive the Contractor’s Work. The Contractor shall not be responsible for discrepancies or defects in the construction or operations by the Owner or Separate Contractor that are not apparent.

§ 6.2.3 The Contractor shall reimburse the Owner for costs the Owner incurs that are payable to a Separate Contractor because of the Contractor’s delays, improperly timed activities or defective construction. The Owner shall be responsible to the Contractor for costs the Contractor incurs because of a Separate Contractor’s delays, improperly timed activities, damage to the Work or defective construction.

§ 6.2.4 The Contractor shall promptly remedy damage that the Contractor wrongfully causes to completed or partially completed construction or to property of the Owner or Separate Contractor as provided in Section 10.2.5.

§ 6.2.5 The Owner and each Separate Contractor shall have the same responsibilities for cutting and patching as are described for the Contractor in Section 3.14.

§ 6.2.6 The Contractor is obligated to comply with all Davis-Bacon and/or State Prevailing regulations if applicable, and shall inform all Subcontractors of this mandatory requirement. Strict compliance of the provisions of certified payrolls and monitoring of that compliance is a direct responsibility of the Contractor for each Subcontractor. Failure of the Contractor to monitor Davis-Bacon requirements including certified payroll compliance by Subcontractors, as evidenced by the Owner’s review and written correction notices provided to the Contractor of non-compliance, will result in delay of progress payments to the Contractor by the Owner.

§ 6.3 Owner’s Right to Clean Up

If a dispute arises among the Contractor, Separate Contractors, and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and the Owner will allocate the cost among those responsible.

ARTICLE 7 CHANGES IN THE WORK

§ 7.1 General

§ 7.1.1

- .1 The Owner anticipates that it will desire the Contractor to accomplish Work that was not able to be reasonably defined in sufficient detail during the solicitation for Bids for this Project. The

- Contractor agrees to perform such Owner Directed Work in accordance with the Contract Documents.
- .2 A fixed sum has been determined by the Owner for each individual and separate Owner Directed Work Item. The total Contract Amount includes the lump sum total of all combined Owner Directed Work Items. It is at the Sole Discretion and Decision of the Owner to Authorize the Contractor to proceed with each individual Owner Directed Work Item. If any or all Owner Directed Work Items are determined to be excluded from the Work, the Owner will provide a Change Order to the Contractor to deduct those amounts from the Contract.
 - .3 If any or all Owner Directed Work Items are authorized by the Owner to be completed. The Owner will issue an Owner Directed Work Order to the Contractor for that Work Item.
 - .4 For each Owner Directed Work Order issued to the Owner, the Contractor shall provide a complete and detailed cost estimate for that item to the Owner. The Contractor's estimate shall be approved by the Owner, prior to the commencement of any Owner Directed Work. Adjustments to the Contract may be made as an additive or deductive Change Order as determined by the difference between the Owner Directed Work Item Allowance, the Final Approved Estimated Cost as submitted by the Contractor, and the final Analysis of the Cost as conducted by the Owner.
 - .5 The Contractor shall provide a complete and accurate time and material account and reconciliation report to the Owner for each issued work authorization for each Owner Directed Work Item.
 - .6 Owner Directed Work Items are defined in the Contract Documents.

§ 7.1.1 Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

All changes in the Work shall be completed for a Fixed Fee.

- .1 Overhead, Profit, and General Conditions
 - (a.) The allowed markup shall cover all indirect project costs, including but not limited to: project Overhead, Profit, and General Conditions
 - (b.) The Contractor shall be allowed a maximum of 14% Overhead, Profit, and General Conditions, on the cost of craft labor, equipment, small tools and materials for self-performed Change Order work.
 - (c.) The Contractor shall be allowed a maximum of 8% Overhead, Profit, and General Conditions on the cost of craft labor, equipment, small tools and materials for Subcontractor Change Order work. The Contractor is not allowed to take a profit on the profit of the Subcontractor, as stated in form HUD-5370, section 29.
 - (d.) A Subcontractor shall be allowed a maximum of 14% of the cost of craft labor, equipment, materials, and small tools for Overhead, Profit, and General Conditions, for performing self-performed Change Order work.
 - (e.) A Lower Tier Subcontractor shall be allowed a maximum of 14% of the cost of craft labor, equipment, materials, and small tools for Overhead, Profit, and General Conditions, for performing Change Order work.

§ 7.1.2 A Change Order shall be based upon agreement among the Owner and Contractor. A Construction Change Directive requires agreement by the Owner and may or may not be agreed to by the Contractor. An order for a minor change in the Work may be issued by the Owner.

§ 7.1.3 Changes in the Work shall be performed under applicable provisions of the Contract Documents. The Contractor shall proceed promptly with changes in the Work, unless otherwise provided in the Change Order, Construction Change Directive, or order for a minor change in the Work.

§ 7.2 Change Orders

§ 7.2.1 A Change Order is a written instrument prepared by the Owner and signed by the Owner and Contractor stating their agreement upon all of the following:

- .1 The change in the Work;
- .2 The amount of the adjustment, if any, in the Contract Sum; and
- .3 The extent of the adjustment, if any, in the Contract Time.

§ 7.3 Construction Change Directives

§ 7.3.1

A Construction Change Directive shall be provided as stipulated by the Owner and in accordance with the King County Housing Authority Change Order Request documents (COR) per Exhibit as designated in Document A101-2017, Article 9.1.7.2. The COR is a written order prepared by the Owner and signed by the Owner and upon Owner's request, by the Architect, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

§ 7.3.2 A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order. The Owner's Change Order Request / Change Order Approval Form (COR/COA) per Exhibit as designated in Contract Document A101-2017, Article 9.1.7.2, including the General Contractor Breakdown Summary (GC-COR) Exhibit, and the Subcontractor Breakdown Summary (SC-COR) Exhibit, shall be used by the Contractor for all construction change directives.

§ 7.3.3 If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

- .1 Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- .2 Unit prices stated in the Contract Documents or subsequently agreed upon;
- .3 Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
- .4 As provided in Section 7.3.4.

§ 7.3.4 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Owner shall determine the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable amount. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the Owner may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.4 shall be limited to the following:

- .1 Costs of labor, including applicable payroll taxes, fringe benefits required by agreement or custom, workers' compensation insurance, and other employee costs approved by the Owner;
- .2 Costs of materials, supplies, and equipment, including cost of transportation, whether incorporated or consumed;
- .3 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others;
- .4 Costs of premiums for all bonds and insurance, permit fees, and sales, use, or similar taxes, directly related to the change; and
- .5 Costs of supervision and field office personnel directly attributable to the change.

§ 7.3.5 If the Contractor disagrees with the adjustment in the Contract Time, the Contractor may make a Claim in accordance with applicable provisions of Article 15.

§ 7.3.6 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Owner of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

§ 7.3.7 A Construction Change Directive signed by the Contractor indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

§ 7.3.8 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Owner. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

§ 7.3.9 Pending final determination of the total cost of a Construction Change Directive to the Owner, the Contractor may request payment for Work completed under the Construction Change Directive in Applications for Payment. The Owner will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the amount that the Owner determines to be reasonably justified. The Owner's interim determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a Claim in accordance with Article 15.

§ 7.3.10 When the Owner and Contractor agree with a determination made concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and the Owner will prepare a Change Order. Change Orders may be issued for all or any part of a Construction Change Directive.

§ 7.4 Minor Changes in the Work

The Architect may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. The Architect's order for minor changes shall be in writing. If the Contractor believes that the proposed minor change in the Work will affect the Contract Sum or Contract Time, the Contractor shall notify the Architect and shall not proceed to implement the change in the Work. If the Contractor performs the Work set forth in the Architect's order for a minor change without prior notice to the Architect that such change will affect the Contract Sum or Contract Time, the Contractor waives any adjustment to the Contract Sum or extension of the Contract Time.

ARTICLE 8 TIME

§ 8.1 Definitions

§ 8.1.1 Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

§ 8.1.2 The date of commencement of the Work is the date established in the Agreement.

§ 8.1.3 The date of Substantial Completion is the date certified by the Owner in accordance with Section 9.8.

§ 8.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

§ 8.2 Progress and Completion

§ 8.2.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

§ 8.2.2 The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, commence the Work prior to the effective date of insurance required to be furnished by the Contractor and Owner.

§ 8.2.3 The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

§ 8.3 Delays and Extensions of Time

§ 8.3.1 If the Contractor is delayed at any time in the commencement or progress of the Work by (1) an act or neglect of the Owner or Architect, of an employee of either, or of a Separate Contractor; (2) by changes ordered in the Work; (3) by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, adverse weather conditions documented in accordance with Section 15.1.6.2, or other causes beyond the Contractor's control; (4) by delay authorized by the Owner pending mediation and binding dispute resolution; or (5) by other causes that the Contractor asserts, and the Owner determines, justify delay, then the Contract Time shall be extended for such reasonable time as the Owner may determine.

§ 8.3.2 Claims relating to time shall be made in accordance with applicable provisions of Article 15.

§ 8.3.3 This Section 8.3 does not preclude recovery of damages for delay by either party under other provisions of the Contract Documents.

ARTICLE 9 PAYMENTS AND COMPLETION

§ 9.1 Contract Sum

§ 9.1.1 The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

§ 9.1.2 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed so that application of such unit prices to the actual quantities causes substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

§ 9.2 Schedule of Values

Where the Contract is based on a stipulated sum or Guaranteed Maximum Price, the Contractor shall submit a schedule of values to the Owner before the first Application for Payment, allocating the entire Contract Sum to the various portions of the Work. The schedule of values shall be prepared in the form, and supported by the data to substantiate its accuracy, required by the Owner. This schedule shall be used as a basis for reviewing the Contractor's Applications for Payment. Any changes to the schedule of values shall be submitted to the Owner and supported by such data to substantiate its accuracy as the Owner may require, and unless objected to by the Owner, shall be used as a basis for reviewing the Contractor's subsequent Applications for Payment.

§ 9.3 Applications for Payment

§ 9.3.1 At least ten days before the date established for each progress payment, the Contractor shall submit to the Owner an itemized Application for Payment using AIA Form G701 and AIA Form G702 and in accordance with Article 5 of A101-2017 prepared in accordance with the schedule of values, if required under Section 9.2, for completed portions of the Work. The application shall be notarized, if required, and supported by all data substantiating the Contractor's right to payment that the Owner require, such as copies of requisitions, and releases and waivers of liens from Subcontractors and suppliers, and shall reflect retainage if provided for in the Contract Documents.

§ 9.3.1.1 As provided in Section 7.3.9, such applications may include requests for payment on account of changes in the Work that have been properly authorized by Construction Change Directives.

§ 9.3.1.2 Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay a Subcontractor or supplier, unless such Work has been performed by others whom the Contractor intends to pay.

§ 9.3.2 Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage, and transportation to the site, for such materials and equipment stored off the site.

§ 9.3.3 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information, and belief, be free and clear of liens, claims, security interests, or encumbrances, in favor of the Contractor, Subcontractors, suppliers, or other persons or entities that provided labor, materials, and equipment relating to the Work.

§ 9.4 Certificates for Payment

§ 9.4.1 The Architect will, within seven days after receipt of the Contractor's Application for Payment, either (1) issue to the Owner a Certificate for Payment in the full amount of the Application for Payment, with a copy to the Contractor; or (2) issue to the Owner a Certificate for Payment for such amount as the Architect determines is properly due, and notify the Contractor and Owner of the Architect's reasons for withholding certification in part as provided in Section 9.5.1; or (3) withhold certification of the entire Application for Payment, and notify the Contractor and Owner of the Architect's reason for withholding certification in whole as provided in Section 9.5.1.

§ 9.4.2 The issuance of a Certificate for Payment will constitute a representation by the Owner, based on the Owner's evaluation of the Work and the data in the Application for Payment, that, to the best of the Owner's knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion, and to specific qualifications expressed by the Owner. However, the issuance of a Certificate for Payment will not be a representation that the Owner has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work; (2) reviewed construction means, methods, techniques, sequences, or procedures; (3) reviewed copies of requisitions received from Subcontractors and suppliers and other data requested by the Owner to substantiate the Contractor's right to payment; or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

§ 9.5 Decisions to Withhold Certification

§ 9.5.1 The Owner may withhold Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Owner's opinion the representations to the Owner required by Section 9.4.2 cannot be made. If the Owner is unable to certify payment in the amount of the Application, the Owner will notify the Contractor as provided in Section 9.4.1. If the Contractor and Owner cannot agree on a revised amount, the Owner will promptly release Payment for the amount for which the Owner is able to make such representations. The Owner may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Payment previously issued, to such extent as may be necessary in the Owner's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from acts and omissions described in Section 3.3.2, because of

- .1 defective Work not remedied;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims, unless security acceptable to the Owner is provided by the Contractor;
- .3 failure of the Contractor to make payments properly to Subcontractors or suppliers for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or a Separate Contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
- .7 repeated failure to carry out the Work in accordance with the Contract Documents.

§ 9.5.2 When either party disputes the Architect's decision regarding a Certificate for Payment under Section 9.5.1, in whole or in part, that party may submit a Claim in accordance with Article 15.

§ 9.5.3 When the reasons for withholding certification are removed, approval will be made for amounts previously withheld.

§ 9.5.4 If the Owner withholds payment under Section 9.5.1.3, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or supplier to whom the Contractor failed to make payment for Work properly performed or material or equipment suitably delivered. If the Owner makes payments by joint check, the Owner shall notify and the Contractor shall reflect such payment on its next Application for Payment.

§ 9.6 Progress Payments

§ 9.6.1 After the Owner has issued an Application for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents.

§ 9.6.2 The Contractor shall pay each Subcontractor, no later than seven days after receipt of payment from the Owner, the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.

§ 9.6.3 The Owner will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Owner on account of portions of the Work done by such Subcontractor.

§ 9.6.4 The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors and suppliers to ascertain whether they have been properly paid. The Owner shall have an obligation to pay, or to see to the payment of money to, a Subcontractor or supplier, except as may otherwise be required by law.

§ 9.6.5 The Contractor's payments to suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.

§ 9.6.6 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

§ 9.6.7 Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Contractor for Work properly performed by Subcontractors or provided by suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor for which payment was made by the Owner. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor, create any fiduciary liability or tort liability on the part of the Contractor for breach of trust, or entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.

§ 9.6.8 Provided the Owner has fulfilled its payment obligations under the Contract Documents, the Contractor shall defend and indemnify the Owner from all loss, liability, damage or expense, including reasonable attorney's fees and litigation expenses, arising out of any lien claim or other claim for payment by any Subcontractor or supplier of any tier. Upon receipt of notice of a lien claim or other claim for payment, the Owner shall notify the Contractor. If approved by the applicable court, when required, the Contractor may substitute a surety bond for the property against which the lien or other claim for payment has been asserted.

§ 9.7 Failure of Payment

If the Owner does not issue a Certificate for Payment, through no fault of the Contractor, within seven days after receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor within seven days after the date established in the Contract Documents, the amount certified by the Owner or awarded by binding dispute resolution, then the Contractor may, upon seven additional days' notice to the Owner, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, plus interest as provided for in the Contract Documents.

§ 9.8 Substantial Completion

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

§ 9.8.2 When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the Owner a comprehensive list of items to be completed or corrected prior to final payment. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

§ 9.8.3 Upon receipt of the Contractor's list, the Owner will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Owner's inspection discloses any item, whether or not included on the Contractor's list, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Owner. In such case, the Contractor shall then submit a request for another inspection by the Owner to determine Substantial Completion.

§ 9.8.4 When the Work or designated portion thereof is substantially complete, the Owner will prepare a Certificate of Substantial Completion that shall establish the date of Substantial Completion; establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance; and fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

§ 9.8.5 The Certificate of Substantial Completion shall be submitted to the Contractor for written acceptance of responsibilities assigned in the Certificate. Upon such acceptance, and consent of surety if any, the Owner shall make payment of retainage applying to the Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

§ 9.9 Partial Occupancy or Use

§ 9.9.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor shall prepare and submit a list to the Owner as provided under Section 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor.

§ 9.9.2 Immediately prior to such partial occupancy or use, the Owner and Contractor shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

§ 9.9.3 Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

§ 9.10 Final Completion and Final Payment

§ 9.10.1 Upon receipt of the Contractor's notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Owner will promptly make such inspection. When the Owner finds the Work acceptable under the Contract Documents and the Contract fully performed, the Owner will promptly notify the Contractor that to the best of the Owner's knowledge, information and belief, and on the basis of the Owner's on-site visits and inspections, the Work has been completed in accordance with the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Application for Payment is due and payable. The Owner's acceptance will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.

§ 9.10.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Owner (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect, (3) a written statement that the Contractor knows of no reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment, (5) documentation of any special warranties, such as manufacturers' warranties or specific Subcontractor warranties, and (6) if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts and releases and waivers of liens, claims, security interests, or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien, claim, security interest, or encumbrance. If a lien, claim, security interest, or encumbrance remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging the lien, claim, security interest, or encumbrance, including all costs and reasonable attorneys' fees.

§ 9.10.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, the Owner shall, upon application by

the Contractor and certification by the Owner, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed, corrected, and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of the surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Owner prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

§ 9.10.4 The making of final payment shall constitute a waiver of Claims by the Owner except those arising from

- .1 liens, Claims, security interests, or encumbrances arising out of the Contract and unsettled;
- .2 failure of the Work to comply with the requirements of the Contract Documents;
- .3 terms of special warranties required by the Contract Documents; or
- .4 audits performed by the Owner, if permitted by the Contract Documents, after final payment.

§ 9.10.5 Acceptance of final payment by the Contractor, a Subcontractor, or a supplier, shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

§ 10.1 Safety Precautions and Programs

The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract.

§ 10.2 Safety of Persons and Property

§ 10.2.1 The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury, or loss to

- .1 employees on the Work and other persons who may be affected thereby;
- .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody, or control of the Contractor, a Subcontractor, or a Sub-subcontractor; and
- .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

§ 10.2.2 The Contractor shall comply with, and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities, bearing on safety of persons or property or their protection from damage, injury, or loss.

§ 10.2.3 The Contractor shall implement, erect, and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards; promulgating safety regulations; and notifying the owners and users of adjacent sites and utilities of the safeguards.

§ 10.2.4 When use or storage of explosives or other hazardous materials or equipment, or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

§ 10.2.5 The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Sections 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2 and 10.2.1.3. The Contractor may make a Claim for the cost to remedy the damage or loss to the extent such damage or loss is attributable to acts or omissions of the Owner or Architect or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 3.18.

§ 10.2.6 The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner.

§ 10.2.7 The Contractor shall not permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition.

§ 10.2.8 Injury or Damage to Person or Property

If either party suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, notice of the injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

§ 10.3 Hazardous Materials and Substances

§ 10.3.1 The Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials or substances. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and notify the Owner of the condition.

§ 10.3.2 Upon receipt of the Contractor's notice, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of the material or substance or who are to perform the task of removal or safe containment of the material or substance. The Contractor will promptly reply to the Owner in writing stating whether or not there is reasonable objection to the persons or entities proposed by the Owner. If the Contractor has an objection to a person or entity proposed by the Owner, the Owner shall propose another to whom the Contractor has no reasonable objection. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable additional costs of shutdown, delay, and start-up.

§ 10.3.3 To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area if in fact the material or substance presents the risk of bodily injury or death as described in Section 10.3.1 and has not been rendered harmless, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), except to the extent that such damage, loss, or expense is due to the fault or negligence of the party seeking indemnity.

§ 10.3.4 The Owner shall not be responsible under this Section 10.3 for hazardous materials or substances the Contractor brings to the site unless such materials or substances are required by the Contract Documents. The Owner shall be responsible for hazardous materials or substances required by the Contract Documents, except to the extent of the Contractor's fault or negligence in the use and handling of such materials or substances.

§ 10.3.5 The Contractor shall reimburse the Owner for the cost and expense the Owner incurs (1) for remediation of hazardous materials or substances the Contractor brings to the site and negligently handles, or (2) where the Contractor fails to perform its obligations under Section 10.3.1, except to the extent that the cost and expense are due to the Owner's fault or negligence.

§ 10.3.6 If, without negligence on the part of the Contractor, the Contractor is held liable by a government agency for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents, the Owner shall reimburse the Contractor for all cost and expense thereby incurred.

§ 10.4 Emergencies

In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7.

ARTICLE 11 INSURANCE AND BONDS

§ 11.1 Contractor's Insurance and Bonds

§ 11.1.1 The Contractor shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Contractor shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. The Owner, Architect, and Architect's consultants shall be named as additional insureds under the Contractor's commercial general liability policy or as otherwise described in the Contract Documents.

§ 11.1.2 The Contractor shall provide surety bonds of the types, for such penal sums, and subject to such terms and conditions as required by the Contract Documents. The Contractor shall purchase and maintain the required bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.

§ 11.1.3 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.

§ 11.1.4 **Notice of Cancellation or Expiration of Contractor's Required Insurance.** Within three (3) business days of the date the Contractor becomes aware of an impending or actual cancellation or expiration of any insurance required by the Contract Documents, the Contractor shall provide notice to the Owner of such impending or actual cancellation or expiration. Upon receipt of notice from the Contractor, the Owner shall, unless the lapse in coverage arises from an act or omission of the Owner, have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by the Contractor. The furnishing of notice by the Contractor shall not relieve the Contractor of any contractual obligation to provide any required coverage.

§ 11.2 Owner's Insurance

§ 11.2.1 The Owner shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Owner shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located.

§ 11.2.2 **Failure to Purchase Required Property Insurance.** If the Owner fails to purchase and maintain the required property insurance, with all of the coverages and in the amounts described in the Agreement or elsewhere in the Contract Documents, the Owner shall inform the Contractor in writing prior to commencement of the Work. Upon receipt of notice from the Owner, the Contractor may delay commencement of the Work and may obtain insurance that will protect the interests of the Contractor, Subcontractors, and Sub-Subcontractors in the Work. When the failure to provide coverage has been cured or resolved, the Contract Sum and Contract Time shall be equitably adjusted. In the event the Owner fails to procure coverage, the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent the loss to the Owner would have been covered by the insurance to have been procured by the Owner. The cost of the insurance shall be charged to the Owner by a Change Order. If the Owner does not provide written notice, and the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain the required insurance, the Owner shall reimburse the Contractor for all reasonable costs and damages attributable thereto.

§ 11.2.3 **Notice of Cancellation or Expiration of Owner's Required Property Insurance.** Within three (3) business days of the date the Owner becomes aware of an impending or actual cancellation or expiration of any property insurance required by the Contract Documents, the Owner shall provide notice to the Contractor of such impending or actual cancellation or expiration. Unless the lapse in coverage arises from an act or omission of the Contractor: (1) the Contractor, upon receipt of notice from the Owner, shall have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by either the Owner or the Contractor; (2) the Contract Time and Contract Sum shall be equitably adjusted; and (3) the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent any loss to the Owner would have been covered by the insurance had it not expired or been cancelled. If the Contractor purchases replacement coverage, the cost of the

insurance shall be charged to the Owner by an appropriate Change Order. The furnishing of notice by the Owner shall not relieve the Owner of any contractual obligation to provide required insurance.

§ 11.3 Waivers of Subrogation

§ 11.3.1 The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents, and employees, each of the other; (2) the Architect and Architect's consultants; and (3) Separate Contractors, if any, and any of their subcontractors, sub-subcontractors, agents, and employees, for damages caused by fire, or other causes of loss, to the extent those losses are covered by property insurance required by the Agreement or other property insurance applicable to the Project, except such rights as they have to proceeds of such insurance. The Owner or Contractor, as appropriate, shall require similar written waivers in favor of the individuals and entities identified above from the Architect, Architect's consultants, Separate Contractors, subcontractors, and sub-subcontractors. The policies of insurance purchased and maintained by each person or entity agreeing to waive claims pursuant to this section 11.3.1 shall not prohibit this waiver of subrogation. This waiver of subrogation shall be effective as to a person or entity (1) even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, (2) even though that person or entity did not pay the insurance premium directly or indirectly, or (3) whether or not the person or entity had an insurable interest in the damaged property.

§ 11.3.2 If during the Project construction period the Owner insures properties, real or personal or both, at or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, to the extent permissible by such policies, the Owner waives all rights in accordance with the terms of Section 11.3.1 for damages caused by fire or other causes of loss covered by this separate property insurance.

§ 11.4 Loss of Use, Business Interruption, and Delay in Completion Insurance

The Owner, at the Owner's option, may purchase and maintain insurance that will protect the Owner against loss of use of the Owner's property, or the inability to conduct normal operations, due to fire or other causes of loss. The Owner waives all rights of action against the Contractor and Architect for loss of use of the Owner's property, due to fire or other hazards however caused.

§ 11.5 Adjustment and Settlement of Insured Loss

§ 11.5.1 A loss insured under the property insurance required by the Agreement shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 11.5.2. The Owner shall pay the Architect and Contractor their just shares of insurance proceeds received by the Owner, and by appropriate agreements the Architect and Contractor shall make payments to their consultants and Subcontractors in similar manner.

§ 11.5.2 Prior to settlement of an insured loss, the Owner shall notify the Contractor of the terms of the proposed settlement as well as the proposed allocation of the insurance proceeds. The Contractor shall have 14 days from receipt of notice to object to the proposed settlement or allocation of the proceeds. If the Contractor does not object, the Owner shall settle the loss and the Contractor shall be bound by the settlement and allocation. Upon receipt, the Owner shall deposit the insurance proceeds in a separate account and make the appropriate distributions. Thereafter, if no other agreement is made or the Owner does not terminate the Contract for convenience, the Owner and Contractor shall execute a Change Order for reconstruction of the damaged or destroyed Work in the amount allocated for that purpose. If the Contractor timely objects to either the terms of the proposed settlement or the allocation of the proceeds, the Owner may proceed to settle the insured loss, and any dispute between the Owner and Contractor arising out of the settlement or allocation of the proceeds shall be resolved pursuant to Article 15. Pending resolution of any dispute, the Owner may issue a Construction Change Directive for the reconstruction of the damaged or destroyed Work.

ARTICLE 12 UNCOVERING AND CORRECTION OF WORK

§ 12.1 Uncovering of Work

§ 12.1.1 If a portion of the Work is covered contrary to the Owner's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by the Owner, be uncovered for the Owner's examination and be replaced at the Contractor's expense without change in the Contract Time.

§ 12.1.2 If a portion of the Work has been covered that the Owner has not specifically requested to examine prior to its being covered, the Owner may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an equitable adjustment to the Contract Sum and Contract Time as may be appropriate. If such Work is not in accordance with the Contract Documents, the costs of uncovering the Work, and the cost of correction, shall be at the Contractor's expense.

§ 12.2 Correction of Work

§ 12.2.1 Before Substantial Completion

The Contractor shall promptly correct Work rejected by the Owner or failing to conform to the requirements of the Contract Documents, discovered before Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Owner's services and expenses made necessary thereby, shall be at the Contractor's expense.

§ 12.2.2 After Substantial Completion

§ 12.2.2.1 In addition to the Contractor's obligations under Section 3.5, if, within one year after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Section 9.9.1, or by terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of notice from the Owner to do so, unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the one-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner, the Owner may correct it in accordance with Section 2.5.

§ 12.2.2.2 The one-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work.

§ 12.2.2.3 The one-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2.

§ 12.2.3 The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

§ 12.2.4 The Contractor shall bear the cost of correcting destroyed or damaged construction of the Owner or Separate Contractors, whether completed or partially completed, caused by the Contractor's correction or removal of Work that is not in accordance with the requirements of the Contract Documents.

§ 12.2.5 Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents. Establishment of the one-year period for correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

§ 12.3 Acceptance of Nonconforming Work

If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

ARTICLE 13 MISCELLANEOUS PROVISIONS

§ 13.1 Governing Law

The Contract shall be governed by the law of the place where the Project is located, excluding that jurisdiction's choice of law rules. If the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern Section 15.4.

§ 13.2 Successors and Assigns

§ 13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to covenants, agreements, and obligations contained in the Contract Documents. Except as provided in Section 13.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

§ 13.2.2 The Owner may, without consent of the Contractor, assign the Contract to a lender providing construction financing for the Project, if the lender assumes the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate the assignment.

§ 13.3 Rights and Remedies

§ 13.3.1 Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

§ 13.3.2 No action or failure to act by the Owner, or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed upon in writing.

§ 13.4 Tests and Inspections

§ 13.4.1 Tests, inspections, and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules, and regulations or lawful orders of public authorities. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. The Contractor shall give the Owner timely notice of when and where tests and inspections are to be made so that the Owner may be present for such procedures. The Owner shall bear costs of tests, inspections, or approvals that do not become requirements until after bids are received or negotiations concluded. The Owner shall directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require.

§ 13.4.2 If the Owner, or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection, or approval not included under Section 13.4.1, the Owner will instruct the Contractor to make arrangements for such additional testing, inspection, or approval, by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Owner of when and where tests and inspections are to be made so that the Owner may be present for such procedures. Such costs, except as provided in Section 13.4.3, shall be at the Owner's expense.

§ 13.4.3 If procedures for testing, inspection, or approval under Sections 13.4.1 and 13.4.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for the Owner's services and expenses, shall be at the Contractor's expense.

§ 13.4.4 Required certificates of testing, inspection, or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Owner.

§ 13.4.5 If the Owner is to observe tests, inspections, or approvals required by the Contract Documents, the Owner will do so promptly and, where practicable, at the normal place of testing.

§ 13.4.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

§ 13.5 Interest

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

ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT

§ 14.1 Termination by the Contractor

§ 14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of 30 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, for any of the following reasons:

- .1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped;
- .2 An act of government, such as a declaration of national emergency, that requires all Work to be stopped;
- .3 Because the Owner has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Section 9.4.1, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents; or
- .4 The Owner has failed to furnish to the Contractor reasonable evidence as required by Section 2.2.

§ 14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work under direct or indirect contract with the Contractor, repeated suspensions, delays, or interruptions of the entire Work by the Owner as described in Section 14.3, constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.

§ 14.1.3 If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days' notice to the Owner, terminate the Contract and recover from the Owner payment for Work executed, as well as reasonable overhead and profit on Work not executed, and costs incurred by reason of such termination.

§ 14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, or their agents or employees or any other persons or entities performing portions of the Work because the Owner has repeatedly failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days' notice to the Owner, terminate the Contract and recover from the Owner as provided in Section 14.1.3.

§ 14.2 Termination by the Owner for Cause

§ 14.2.1 The Owner may terminate the Contract if the Contractor

- .1 repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
- .2 fails to make payment to Subcontractors or suppliers in accordance with the respective agreements between the Contractor and the Subcontractors or suppliers;
- .3 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- .4 otherwise is guilty of substantial breach of a provision of the Contract Documents.

§ 14.2.2 When any of the reasons described in Section 14.2.1 exist, the Owner may, without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven days' notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

- .1 Exclude the Contractor from the site and take possession of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
- .2 Accept assignment of subcontracts pursuant to Section 5.4; and
- .3 Finish the Work by whatever reasonable method the Owner may deem expedient. Upon written request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.

§ 14.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

§ 14.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Architect's services and expenses made necessary thereby, and other damages incurred by the Owner and not expressly waived, such excess shall be paid to the Contractor. If such costs and damages exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The amount to be paid to the Contractor or Owner, as the case may be, upon application, and this obligation for payment shall survive termination of the Contract.

§ 14.3 Suspension by the Owner for Convenience

§ 14.3.1 The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work, in whole or in part for such period of time as the Owner may determine.

§ 14.3.2 The Contract Sum and Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay, or interruption under Section 14.3.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent

- .1 that performance is, was, or would have been, so suspended, delayed, or interrupted, by another cause for which the Contractor is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of the Contract.

§ 14.4 Termination by the Owner for Convenience

§ 14.4.1 The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause.

§ 14.4.2 Upon receipt of notice from the Owner of such termination for the Owner's convenience, the Contractor shall

- .1 cease operations as directed by the Owner in the notice;
- .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
- .3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

§ 14.4.3 In case of such termination for the Owner's convenience, the Owner shall pay the Contractor for Work properly executed; costs incurred by reason of the termination, including costs attributable to termination of Subcontracts; and the termination fee, if any, set forth in the Agreement.

ARTICLE 15 CLAIMS AND DISPUTES

§ 15.1 Claims

§ 15.1.1 Definition

A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, a change in the Contract Time, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim.

§ 15.1.2 Time Limits on Claims

The Owner and Contractor shall commence all Claims and causes of action against the other and arising out of or related to the Contract, whether in contract, tort, breach of warranty or otherwise, in accordance with the requirements of the binding dispute resolution method selected in the Agreement and within the period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and Contractor waive all Claims and causes of action not commenced in accordance with this Section 15.1.2.

§ 15.1.3 Notice of Claims

§ 15.1.3.1 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered prior to expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party. Claims by either party under this Section 15.1.3.1 shall be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later.

§ 15.1.3.2 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party.

§ 15.1.4 Continuing Contract Performance

§ 15.1.4.1 Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

§ 15.1.4.2 The Contract Sum and Contract Time shall be adjusted in accordance with the Initial Decision Maker's decision, subject to the right of either party to proceed in accordance with this Article 15. The Architect will issue Certificates for Payment in accordance with the decision of the Initial Decision Maker.

§ 15.1.5 Claims for Additional Cost

If the Contractor wishes to make a Claim for an increase in the Contract Sum, notice as provided in Section 15.1.3 shall be given before proceeding to execute the portion of the Work that is the subject of the Claim. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4.

§ 15.1.6 Claims for Additional Time

§ 15.1.6.1 If the Contractor wishes to make a Claim for an increase in the Contract Time, notice as provided in Section 15.1.3 shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay, only one Claim is necessary.

§ 15.1.6.2 If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated, and had an adverse effect on the scheduled construction.

§ 15.1.7 Waiver of Claims for Consequential Damages

The Contractor and Owner waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes

- .1 damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and
- .2 damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit, except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 14. Nothing contained in this Section 15.1.7 shall be deemed to preclude assessment of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.

§ 15.2 Initial Decision

§ 15.2.1 Claims, excluding those where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2 or arising under Sections 10.3, 10.4, and 11.5, shall be referred to the Initial Decision Maker for initial decision. The Architect will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to mediation of any Claim. If an initial decision has not been rendered within 30 days after the Claim has been referred to the Initial Decision Maker, the party asserting the Claim may demand mediation and binding dispute resolution without a decision having been rendered. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

§ 15.2.2 The Initial Decision Maker will review Claims and within ten days of the receipt of a Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim, (4) suggest a compromise, or (5) advise the parties that the Initial Decision Maker is unable to resolve the Claim if the Initial Decision Maker lacks sufficient information to evaluate the merits of the Claim or if the Initial Decision Maker concludes that, in the Initial Decision Maker's sole discretion, it would be inappropriate for the Initial Decision Maker to resolve the Claim.

§ 15.2.3 In evaluating Claims, the Initial Decision Maker may, but shall not be obligated to, consult with or seek information from either party or from persons with special knowledge or expertise who may assist the Initial Decision Maker in rendering a decision. The Initial Decision Maker may request the Owner to authorize retention of such persons at the Owner's expense.

§ 15.2.4 If the Initial Decision Maker requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of the request, and shall either (1) provide a

response on the requested supporting data, (2) advise the Initial Decision Maker when the response or supporting data will be furnished, or (3) advise the Initial Decision Maker that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Initial Decision Maker will either reject or approve the Claim in whole or in part.

§ 15.2.5 The Initial Decision Maker will render an initial decision approving or rejecting the Claim, or indicating that the Initial Decision Maker is unable to resolve the Claim. This initial decision shall (1) be in writing; (2) state the reasons therefor; and (3) notify the parties and the Architect, if the Architect is not serving as the Initial Decision Maker, of any change in the Contract Sum or Contract Time or both. The initial decision shall be final and binding on the parties but subject to mediation and, if the parties fail to resolve their dispute through mediation, to binding dispute resolution.

§ 15.2.6 Either party may file for mediation of an initial decision at any time, subject to the terms of Section 15.2.6.1.

§ 15.2.6.1 Either party may, within 30 days from the date of receipt of an initial decision, demand in writing that the other party file for mediation. If such a demand is made and the party receiving the demand fails to file for mediation within 30 days after receipt thereof, then both parties waive their rights to mediate or pursue binding dispute resolution proceedings with respect to the initial decision.

§ 15.2.7 In the event of a Claim against the Contractor, the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor's default, the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

§ 15.2.8 If a Claim relates to or is the subject of a mechanic's lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.

§ 15.3 Mediation

§ 15.3.1 Claims, disputes, or other matters in controversy arising out of or related to the Contract, except those waived as provided for in Sections 9.10.4, 9.10.5, and 15.1.7, shall be subject to mediation as a condition precedent to binding dispute resolution.

§ 15.3.2 The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of the Agreement. A request for mediation shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the mediation. The request may be made concurrently with the filing of binding dispute resolution proceedings but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order. If an arbitration is stayed pursuant to this Section 15.3.2, the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.

§ 15.3.3 Either party may, within 30 days from the date that mediation has been concluded without resolution of the dispute or 60 days after mediation has been demanded without resolution of the dispute, demand in writing that the other party file for binding dispute resolution. If such a demand is made and the party receiving the demand fails to file for binding dispute resolution within 60 days after receipt thereof, then both parties waive their rights to binding dispute resolution proceedings with respect to the initial decision.

§ 15.3.4 The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

§ 15.4 Arbitration

§ 15.4.1 If the parties have selected arbitration as the method for binding dispute resolution in the Agreement, any Claim subject to, but not resolved by, mediation shall be subject to arbitration which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules in effect on the date of the Agreement. The Arbitration shall be conducted in the place where the Project is located, unless another location is mutually agreed upon. A demand for arbitration shall be

made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the arbitration. The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded.

§ 15.4.1.1 A demand for arbitration shall be made no earlier than concurrently with the filing of a request for mediation, but in no event shall it be made after the date when the institution of legal or equitable proceedings based on the Claim would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the Claim.

§ 15.4.2 The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

§ 15.4.3 The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Agreement, shall be specifically enforceable under applicable law in any court having jurisdiction thereof.

§ 15.4.4 Consolidation or Joinder

§ 15.4.4.1 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may consolidate an arbitration conducted under this Agreement with any other arbitration to which it is a party provided that (1) the arbitration agreement governing the other arbitration permits consolidation, (2) the arbitrations to be consolidated substantially involve common questions of law or fact, and (3) the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s).

§ 15.4.4.2 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration, provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of any claim, dispute or other matter in question not described in the written consent.

§ 15.4.4.3 The Owner and Contractor grant to any person or entity made a party to an arbitration conducted under this Section 15.4, whether by joinder or consolidation, the same rights of joinder and consolidation as those of the Owner and Contractor under this Agreement.

ARTICLE 16 Federal Provisions

§ 16.1 Prohibition Against the Use of Lead Based Paint

The Contractor shall comply with the prohibition against the use of lead based paint contained in the Lead Based Paint Poisoning Act (42 USC 4821-4846) as implemented by 24 CFR Part 35.

§ 16.2 Federal Health, Safety, and Accident Prevention

The Contractor shall 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 the construction safety and health standards promulgated by the Secretary of Labor by regulation. The Contractor shall comply with §5.07 and with the regulations and standards issued by the Secretary of Labor at 29 CFR Parts 1904 and 1926 Failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act (Public Law 9154, 83 Stat. 96), 40 USC 3701 to 3708 et seq.

§ 16.3 Clean Air and Water Applicable to Contracts in Excess Of \$150,000

The Contractor shall comply with all requirements of the United States Environmental Protection Agency (EPA) 40 CFR Part 15, 42 USC 7401, 33 USC 1251 et seq., the Federal Water Pollution Control Act 33 USC 1281 et seq., and Executive Order 11738.

§ 16.4 Energy Efficiency

The Contractor shall comply with all standards and policies relating to energy efficiency which are contained in the energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. L. 94-163) in Washington State and the Federal Energy Policy and Conservation Act (42 USC 6201).

§ 16.5 Labor Standards; Davis-Bacon and Related Acts, if Applicable

The Contractor shall comply with all provisions of the Davis-Bacon Act and Related Acts such as the Housing Act of 1937, the National Housing Act, the Housing and Community Development Act of 1974, the National Affordable Housing Act of 1990, Equal Employment Opportunity 41 CFR Part 60 or similar related Acts for Federal Labor Standards for this Contract. The Contractor is responsible for the full compliance of all employers, including the Contractor, Subcontractors, and all the Lower-Tier Subcontractors with the Labor Standards Provisions applicable to this Project.

§ 16.6 Interest of Member of Congress

No member of or delegate to the Congress of the United States of America shall be admitted to any share or part of this Contract or to any benefit to arise therefrom, but this provision shall not be construed to extend to this Contract if made with a corporation for its general benefit. Copeland Anti-Kickback Act 40 USC 3145.

§ 16.7 Interest of Members, Officers, Commissioners and Employees, or Former Members, Officers and Employees

No member, officer, or employee of King County Housing Authority, no member of the Governing body of the locality in which the project is situated, no member of the governing body in which the Owner was activated, and no other public official or such 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.

§ 16.8 Organization Conflicts of Interest

- .1 The Contractor warrants that to the best of its knowledge and belief and except as otherwise disclosed, it does not have any organizational conflict of interest which is defined as a situation in which the nature of the work under this Contract and the Contractor's organizational, financial, contractual or other interests are such as:
 - .a Award of the Contract may result in an unfair competitive advantage; or
 - .b The Contractor's objectivity in performing the Contract Work may be impaired.
- .2 The Contractor agrees that if after award they discover an organizational conflict of interest with respect to this Contract, they shall make an immediate and full disclosure in writing to the Contracting Officer, which shall include a description of the action, which the Contractor has taken or intend to take to eliminate or neutralize the conflict. The Owner may, however, terminate the Contract if it deems the action to be in the best interest of the Owner.
- .3 In the event the Contractor was aware of an organizational conflict of interest before the award of this Contract and intentionally did not disclose the conflict to the Contracting Officer, the Owner may terminate the Contract for default.
- .4 In the event the Contractor was aware of an organizational conflict of interest before the award of this Contract and intentionally did not disclose the conflict to the Contracting Officer, the Owner may terminate the Contract for default.

§ 16.9 Lobbying

Contractor shall be in compliance with the Byrd Anti-Lobbying Amendment 31 USC 3145.

§ 17 Audits and Inspections

The records and documents with respect to all matters covered by this Contract shall be subject at all times to inspection, review or audit by the Owner or any other government agency so authorized by law during the performance of this Contract. The Owner shall have the right to an annual audit of the Contractor's financial statement and condition.

- .1 The Contractor shall maintain accounts and records in accordance with State Auditor's procedures, including personnel, property, financial and programmatic records which sufficiently and properly reflect all direct and indirect costs of any nature expended and services performed in the performance of this Contract and other such records as may be deemed necessary by the Owner to ensure proper accounting for all funds contributed by the Owner to the performance of this Contract and compliance with this Contract.
- .2 The Owner shall maintain these records for a period of six (6) years after termination hereof unless permission to destroy them is granted by the office of the archivist in accordance with RCW Chapter 40.14

§ 18 Section 3 – Instructions, Requirements and Income Guidelines, if Applicable

Contractor shall comply with all requirements of the Section 3 Program for economic opportunities providing to the greatest extent possible, job training employment and contract opportunities for low or very low income residents including persons who are recipients of HUD assistance for housing, with preference for both targeted workers living in the service area or neighborhood of the Development and YouthBuild participants, as defined at 24 CFR Part 75 (“Section 3 Regulations”) per the Exhibit, as designated in AIA Contract Document A101-2007, Section 8.6.1.

§ 18.1 The work to be performed under this contract is subject to the requirements of the Section 3 Regulations. 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, including persons who are recipients of HUD assistance for housing, with preference for both targeted workers living in the service area or neighborhood of the Development and YouthBuild participants.

§ 18.2 The parties to this contract agree to comply with HUD's Section 3 Regulations. 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 Section 3 Regulations.

§ 18.3 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.

§ 18.4 The Contractor agrees to include this Section 3 clause in every subcontract subject to compliance with Section 3 Regulations, 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 Section 3 Regulations. 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 Section 3 Regulations.

§ 18.5 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 Section 3 Regulations require employment opportunities to be directed, were not filled to circumvent the Contractor's obligations under Section 3 Regulations.

§ 18.6 Noncompliance with Section 3 Regulations may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

§ 18.7 The Contractor shall submit to the Owner a Section 3 Work Plan, including hiring and subcontracting activities, and an Individual Certification Form for each person that is assigned to the project, prior to the contract execution. The Contractor will submit to the Owner with each Application for Payment the Section 3 Labor Hours Benchmark Status Report and any Individual Certification Form(s) for persons not initially assigned to the project prior to the contract execution. Noncompliance, incorrect, or missing documents will result in progress payments being withheld until all issues are resolved to the satisfaction of the Owner.

§ 18.8 Section 3 Employment and Training. Without limiting Contractor's obligation to comply with Section 3 Regulations, Contractor specifically agrees to use best efforts to provide employment and training opportunities to Section 3 workers in the following order of priority:

- .1 To residents of the KCHA development where the work is being performed;
- .2 To residents of other KCHA developments or for residents of Section 8–assisted housing managed by KCHA;
- .3 To participants in YouthBuild programs; and
- .4 To low- and very low-income persons residing within the Puget Sound Area.

§ 18.8 Section 3 Contracting. Without limiting Contractor's obligation to comply with Section 3 Regulations,

Contractor specifically agrees to use best efforts to award contracts and subcontracts to business concerns that provide economic opportunities to Section 3 workers in the following order of priority:

- .1 To Section 3 business concerns that provide economic opportunities for KCHA residents of the development where the work is being performed;
- .2 To Section 3 business concerns that provide economic opportunities for KCHA residents of other KCHA developments or Section-8 assisted housing managed by KCHA;
- .3 To YouthBuild programs; and
- .4 To Section 3 business concerns that provide economic opportunities to Section 3 workers residing within the Puget Sound Area.

§ 19 OTHER INFORMATIVE INFORMATION

§ 19.1 Certificate of Endorsement, Final Project Schedule, Subcontractor List, Performance and Payment Bond and Section 3 Plan must be received and approved by the Owner prior to the issuance of the Notice to Proceed.



PERFORMANCE AND PAYMENT BOND INSTRUCTIONS

DIRECTIONS FOR PREPARATION OF PERFORMANCE AND PAYMENT BOND

1. Individual sureties, partnerships, or corporations not in the surety business will not be acceptable.
2. The name of the Principal shall be shown exactly as it appears in the Contract.
3. The penal sum shall not be less than required by the Specifications.
4. If the Principals are partners or joint venturers, each member shall execute the bond as an individual and state its place of residence.
5. If the principal is a corporation, the bond shall be executed under its corporate seal. If the corporation has no corporate seal, it shall so state and affix a scroll or adhesive seal following the corporate name.
6. The official character and authority of the person(s) executing the bond for the Principal, if a corporation, shall be certified by the Secretary or Assistant Secretary thereof under the corporate seal, or copies attached to such records of the corporation as will evidence the official character and authority of the officer signing, duly certified by the Secretary or Assistant Secretary, under the corporate seal, to be true copies.
7. The current power-of-attorney of the person signing for the surety company must be attached to the bond.
8. The date of the bond must not be prior to the date of the Contract.
9. The following information must be placed on the bond by the surety company:
 - a. The Rate of premium in dollars per thousand; and
 - b. The total dollar amount of premium charged
10. The signature of a witness shall appear in the appropriate place attending to the signature of each party of the bond.
11. Type or print the name underneath each signature appearing on the bond
12. An executed copy of the bond must be attached to each copy of the Contract (original counterpart) intended for signing.



PERFORMANCE AND PAYMENT BOND

KNOW ALL MEN BY THESE PRESENT, That we the Undersigned, _____

as **PRINCIPAL**, and _____ as **SURETY** are held and bound unto the **KING COUNTY HOUSING AUTHORITY** of Seattle, Washington, hereinafter called the Public Housing Authority in the penal sum of:

\$ _____ and No/100 (\$ _____) **DOLLARS**, lawful money of the United States, for the payment of which Lawful money of the United States, for the payment of which sum will and truly be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Principal has entered into a certain Contract with the Public Housing Authority dated _____, 20____, a copy of which is hereto attached and made a part hereof.

NOW, THEREFORE, the condition of this obligation is such that if the Principal shall in all respects fully perform the Contract and all duly authorized modifications thereof, during its original term and any extensions thereof that may be granted and during any guaranty period for which the Contract provides, and if the Principal shall fully satisfy all claims arising out of the prosecution of the Work under the contract and shall fully indemnify the Public Housing Authority for all expenses which it may incur by reason of such claims, including its attorney’s fees and court costs, and if the Principal shall make full payment to all persons supplying labor, services, materials, or equipment in the prosecution of the Work under the contract, in default of which such persons shall have a direct right of action hereupon, and if the Principal shall pay or cause to be paid all sales and use taxes payable as a result of the performance of the Contract as well as payment of gasoline and special motor fuels taxes in the performance of the Contract and all motor vehicle fees required for commercial motor vehicles used in connection with the performance of the Contract, then this obligation shall be void; otherwise, it shall remain in full force and effect. No modification of the Contract or extension of the term thereof, nor any forbearance on the part of the Public Housing Authority, shall in any way release the Principal or the Surety from liability hereunder. Notice to the Surety of any such modification, extension, or forbearance is hereby waived.

IN WITNESS WHEREOF, the aforesaid Principal and Surety have executed this instrument and affixed their seals hereto, this _____ day of _____ 20____.

WITNESS:	_____	(Individual Principal)	
	_____	(Business Address)	(Seal)
	_____	(Individual Principal)	
	_____	(Business Address)	(Seal)
ATTEST:	_____	(Corporate Principal)	
	_____	(Business Address)	
	_____	(By)	(Corporate Seal)
	_____	(Title)	
ATTEST:	_____	(Surety)	
	_____	(Business Address)	
	_____	(By)	(Corporate Seal)
	_____	(Title)	

The Rate of Premium on this Bond is \$ _____ per thousand.
The Total Amount of Premium Charges is \$ _____
(The above is to be filled in by Surety Company. * Power of Attorney of person signing for Surety Company must be attached.)



CERTIFICATE AS TO CORPORATE PRINCIPAL

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____ certify that I am the President / Vice President / Secretary / _____ of the Entity: Corporation /LLC / _____, named as the Principal in the foregoing bond. The authorized Official of the named bonding agent who signed the said bond on behalf of the Principal, hereby certifies that said bond was fully signed, sealed and attested for and in behalf of said Entity by authority of its Governing body.

Named Bonding Agent: _____

Affix Corporate Seal / Authorized Signature:

KING COUNTY HOUSING AUTHORITY INSURANCE REQUIREMENTS

INSTRUCTIONS / ENDORSEMENT INFORMATION FOR COMPLETING, EXECUTING, AND SUBMITTING EVIDENCE OF INSURANCE

A. INSURED CONTRACTOR:

1. In order to reduce problems and time delays in providing evidence of insurance to the King County Housing Authority you are requested to give your insurance agent or broker a copy of *the Insurance Requirements Sheet along with the Instructions/Endorsement Form(s) for Completing, Executing, and Submitting Evidence of Insurance.*
2. If the agreement requires Workers' Compensation coverage and you have been authorized by the State to self-insure Workers' Compensation, then a copy of the certificate from the State authorizing self-insurance for Workers' Compensation shall meet the requirements for Workers' Compensation insurance covering activities within the State.
3. All questions relating to insurance should be directed to the department or office responsible for your contract, lease, permit, or other agreement.

B. INSURANCE AGENT OR BROKER:

1. The appropriate Endorsement Form shall include:
 - a. King County Housing Authority as Additional Insured
 - b. State that the Contractor's Insurance Is Primary
 - c. State King County Housing Authority's Insurance Is Non-Contributory In Claims Settlement Funding

PLEASE NOTE: King County Housing Authority **WILL NOT ACCEPT** Certificates of Insurance Alone.

2. More than one insurance policy may be required to comply with the insurance requirements. Endorsement forms appropriate to your insured's agreement, contract, lease or permit are included. In each instance, King County Housing Authority shall be named as additionally insured on the appropriate endorsement forms.
3. You shall have an authorized representative of the insurance company forward the completed endorsement forms with his/her phone number noted at the bottom of the page, to King County Housing Authority.
4. The name of the Insurance Company underwriting the coverage and its address shall be noted on the endorsement form.
5. The "General description of agreement(s) and/or activity(s) insured" shall include reference to the activity and/or to either the specific King County Housing Authority's:
 - a. Project or Site Name
 - b. Contract Number
 - c. Lease Number
 - d. Permit Number
 - e. Construction Approval Number



**EASTRIDGE HOUSE FIRE MONITORING SYSTEM UPGRADE
CONTRACT DOCUMENTS C.4**

6. The Coverage and limits for each type of insurance are specified on the insurance requirements sheet. When coverage is on a scheduled basis, then a separate sheet is to be attached to the endorsement listing such scheduled locations, vehicles, etc. so covered.
7. Endorsements to excess policies will be required when primary insurance is insufficient in complying with King County Housing Authority's requirements.
8. If there is insufficient space on the form to note pertinent information, such as inclusions, exclusions or specific provisions, etc., a separate sheet may be attached.
9. When additional sheets are attached, change the number of pages at the bottom of the form to so indicate.
10. Completed Endorsement(s) including cancellation notices and questions relating to the required insurance are to be directed to:

KING COUNTY HOUSING AUTHORITY
ATTN: CAPITAL CONSTRUCTION DEPARTMENT
700 ANDOVER PARK WEST, SUITE C
TUKWILA, WA 98188

11. Improperly Completed Endorsements will be returned to your insured for correction by an authorized representative of the insurance company.
12. For extensions or renewals on insurance policies which have King County Housing Authority Endorsement Form(s) attached, the Housing Authority will accept a copy of the endorsement to extend the period of coverage as evidence of continued coverage.

C. MINIMUM LIMITS:

1. REFER TO "Insurance Requirements" attached.



INSURANCE REQUIREMENTS FOR BUILDING TRADE CONTRACTORS (with Construction Risks)

The Awarded Contractor shall comply as follows:

Contractor shall procure and maintain, at their expense, for the duration of the contract insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors.

THE KING COUNTY HOUSING AUTHORITY (AUTHORITY) SHALL BE NAMED AS ADDITIONALLY INSURED ON THE APPROPRIATE ENDORSEMENT FORMS.

MINIMUM SCOPE OF INSURANCE:

Coverage shall be at least as broad as:

1. Insurance Services Office Commercial General Liability coverage including Products / Completed Operations.
2. Insurance Services Office covering any Owned, Leased, Hired and Non-owned, and Automobile Liability.
3. Workers' Compensation insurance as required by State law and Employers Liability coverage.
4. Builders Risk (Property / Course of Construction insurance covering for all risks of loss for all projects in excess of \$250,000.)
5. Professional Liability / Errors and Omission (when applicable).

MINIMUM LIMITS OF INSURANCE:

Contractor shall maintain limits no less than:

1. General Liability: \$1,000,000 per occurrence, \$2,000,000 general aggregate, including \$1,000,000 Products / Completed Operations for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project / location or the general aggregate limit shall be twice the required occurrence limit.
2. Automobile Liability: \$1,000,000 per accident for bodily injury / property damage.
3. Employer's Liability / Washington Stop Gap: \$1,000,000 per accident for bodily injury, sickness or disease.
4. Builder Risk (Property) / Course of Construction: Completed value of the project.
5. Professional Liability / Errors and Omissions: \$1,000,000 per claim; \$2,000,000 aggregate (when applicable).

DEDUCTIBLES AND SELF-INSURED RETENTIONS:

Any deductibles or self-insured retentions must be declared to and approved by the Authority. At the option of the Authority, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Authority, its successors and assigns, director, officers, officials, employees, agents, partners and volunteers; or the Contractor shall provide a financial guarantee satisfactory to the Authority guaranteeing payment of losses and related investigations, claim administration and defense expenses.



NOTE: If this contract deals with hazardous materials or activities (i.e. lead based paint, asbestos, armed security guards) additional provisions covering those exposures must be included in order to protect the Authority's interests.

OTHER INSURANCE PROVISIONS:

General Liability and Automobile Liability Policies are to contain, or be endorsed to contain, the following provisions:

1. The Authority, its successors and assigns, director, officers, officials, employees, agents, partners, and volunteers are to be covered as additional insureds with respect to (i) general liability arising out of work done or operations performed by or on behalf of the contractor, including materials, parts or equipment furnished in respect to such work or operations. **The endorsement(s) effectuating the foregoing additional insured coverage shall be ISO form CG 20 10 11 85, or CG 20 10 10 01 issued concurrently with CG 20 37 10 01, or their equivalent¹** as long as it provides additional insured coverage, and **not** limited to the minimum acceptable as required herein, for completed operations; (ii) automobile liability arising out of vehicles owned, leased, hired, or borrowed by or on behalf of the Contractor; (iii) any insurance written on a claims made basis, shall have a retroactive date that coincides with, or precedes, the commencement of any work under this contract. Evidence of such coverage shall be maintained for a minimum of six (6) years beyond the expiration of the project and if a Claims Made policy is not renewed or replaced, then evidence of an extended reporting period of six (6) years shall be provided.
2. For any claims related to this project, the Contractor's insurance coverage shall be primary insurance as respects the Authority, its successors and assigns, director, officers, officials, employees, agents, partners and volunteers. Any insurance or self-insurance maintained or expired by the Authority, its officers, officials, employees, or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.
3. The Contractor on behalf of itself and its liability insurance carriers release and waive any claims and subrogation rights against The Authority, its successors and assigns, director, officers, officials, employees, agents, partners, and volunteers. The Contractor agrees that they will cause its insurance carriers to include in its policies such a clause or endorsement. If extra cost shall be charged therefore, the Contractor shall pay the same.
4. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled or materially changed, except after thirty (30) days / (ten (10) days for non-payment of premium) without prior written notice given to the Authority through certified mail, with return receipt requested.
5. Maintenance of the proper insurance for the duration of the contract is a material element of the contract. Material changes in the required coverage or cancellation of the coverage shall constitute a material breach of the contract.

Builders Risk / Course of Construction Policies shall contain the following provisions:

1. The Authority and its insurers shall be named as loss payees.
2. The insurer shall waive all rights of subrogation against the Authority, its successors and assigns, director, officers, officials, employees, agents, partners and volunteers.

¹ "Equivalent" means that any endorsements provided must have the equivalent coverage of the listed endorsements. NOTE: This may cost the Contract extra money to get this coverage.

ACCEPTABILITY OF INSURERS:

Insurance is to be placed with insurers with a current A.M. Best's rating of no less than **A-:VII**. Contractors must provide written verification of their insurer's rating.

VERIFICATION OF COVERAGE:

Contractor shall furnish the Authority with **original certificates** and **amendatory endorsements** affecting coverage required by this clause. The endorsements should be on forms provided by the Authority or on other than the Authority's forms, provided those endorsements conform fully to the requirements. All certificates and endorsements are to be received and approved by the Authority before work commences in sufficient time to permit Contractor to remedy any deficiencies. The Authority reserves the right to require complete, certified copies of all required insurance policies, or pertinent parts thereof, including endorsements affecting the coverage required by these specifications at any time.

SUBCONTRACTORS:

1. Subcontractor shall include the Contractor as additional insured under their policies. All coverages for subcontractors shall be subject to all of the requirements stated herein.
2. Contractor shall be responsible for the adequacy of required coverages for subcontractors, and compile related certificates of insurance and endorsements evidencing subcontractors' compliance.

INDEMNIFICATION AND HOLD HARMLESS:

1. To the fullest extent permitted by law the Contractor hereby agrees to indemnify and hold harmless the KCHA, its successors and assigns, directors, officials, officers and employees, volunteers, partners and agents (all foregoing singly and collectively "Indemnitees"), from and against any and all claims losses, harm, costs, liabilities, damages and expenses including, but not limited to, reasonable attorneys' fees arising or resulting from the performance of the Work, or the acts or omissions of the Contractor its successors and assigns, employees, subcontractors or anyone acting on the Contractor's behalf in connection with this Contract or its performance; PROVIDED, however, that the Contractor shall not be required to so indemnify any such Indemnitees against liability for damages caused by or resulting from the sole negligence of Indemnitees; PROVIDED FURTHER that if such damages are caused by or result from the concurrent negligence of the Indemnitees and the Contractor or anyone acting on the Contractor's behalf, then the Contractor's indemnity hereunder shall be limited to the extent of the negligence of the Contractor, its successors and assigns, et al.
2. The foregoing indemnity is specifically and expressly intended to constitute waiver of the Contractor's immunity under Washington's Industrial Act, RCW Title 51, and that this waiver has been specifically negotiated and agreed upon by the parties.
3. The Contractor hereby agrees to require all its subcontractors or anyone acting under its direction or control or on its behalf in connection with or incidental to the performance of this Contract to execute an indemnity clause identical to the preceding clause, specifically naming KCHA as Indemnitee, and failure to do so shall constitute a material breach of this Contract by the Contractor.

SITE SPECIFIC SAFETY PLAN REQUIREMENTS

Following is a list of the elements that are typically addressed in a construction site specific safety plan. A site specific safety plan will be one of the required post-selection documents be submitted by the contractor selected through this bid solicitation.

In addition to the typical elements of a construction safety plan that addresses the contractor, the Governor of the State of Washington has instituted additional proclamations and rules surrounding the COVID-19 virus that must be included. Because COVID-19 is a pandemic which is evolving rapidly, when warranted, it is expected that these project-specific safety plan(s) will be updated by the Contractor to reflect the most current rules in effect.

NOTE: For any project that requires entry into occupied units, the Contractor's Site Specific Safety Plan **will be required** to describe the specific construction techniques and use of PPE designed planned to keep the tenants and the workers safe from COVID-19 virus transmission.

The selected contractor with responsible for obtaining similar plans from all subcontractors and for the supervision and enforcement of safety requirements on the site. The contractor's Site-Specific Safety Plan will be submitted to KCHA before any work can begin. The Plan will need to address the following:

1. An initial job/job-site safety orientation and a schedule of weekly safety meetings that show employees and subcontractors what they need to know to perform their job assignments safely.
2. Details how and when to report on-the-job injuries.
3. Identifies on-site available 1st Aid / CPR trained personnel, readily accessible first-aid on the job site and/or access to the nearest clinic or hospital from the job site.
4. Identifies what to do in an emergency, including how to exit the workplace.
5. Lists the required personal protective equipment (PPE) and describes the proper use and care of the PPE.
6. Details the on-site Haz-Com Program that identifies hazardous materials (Asbestos, Lead) or chemicals including instruction about the safe use and storage.
7. Designates an on-site representative responsible for job-site Safety.
8. Designates who is responsible for performing and recording regular periodic site reviews, and inspections for your employees and subcontractors.
9. Describes programs related to housekeeping and jobsite safety.
10. Outlines the job-site specific fall protection plan.
11. Describes electrical and/or power generation controls on-site.
12. Has provisions for trenching /excavations and/or confined space entry.



13. Outlines procedures that comply with the governor’s requirements as stated in his COVID-19 Phase 2 Construction Restart Job Site Work Plan; including the following:
 - a. General site COVID-19 measures.
 - b. Occupied unit entry (what workers PPE workers will be required to wear, sanitization protocols, etc. that will keep both the worker and the tenant safe).
 - c. Occupied unit exit (what workers will be required to do upon exiting an occupied unit that will keep both the work and the tenant safe).
 - d. Procedures workers will have to follow if entering multiple units within a day (with emphasis on PPE protocols between units if worker(s) are entering multiple units one after the other).



SUB-CONTRACTOR VERIFICATION FORM

It is the responsibility of the General Contractor to obtain and verify the Subcontractor’s Information described below. For compliance, the General Contractor must submit a copy of the Subcontractor Verification form prior to the sub starting work. A copy of the Affidavit of Intent form must accompany the applicable Certified Payroll. Without these forms, the Pay Application maybe withheld.

KCHA will review subcontractors’ qualifications, safety record, and the history of compliance (including subcontractor’s principals working under another company name) with labor and other state and federal laws. Based on this review, KCHA reserves the right at its sole discretion to reject subcontractors and require the selected General Contractor to replace or substitute a subcontractor with one acceptable to KCHA.

Name of Company: _____

Physical Address: _____

Contact Name and Title _____

Email Address: _____ Phone No.: _____

WA State Contractor’s License: _____ UBI Number: _____

Employment Security Number: _____ L&I’s Workers’ Comp. Acct. ID: _____

Federal Tax ID Number: _____ DUNS Number: _____

SUB-CONTRACTOR IS A(N): Individual Partnership* Corporation** – in state of _____

* If Partnership, provide Full Name(s) and Address(es) of all parties

** If your company is “also known as (AKA)” or “doing business as (DBA) list all names

SUB-CONTRACTOR’S EXPERIENCE MODIFICATION RATE (EMR): 2020____; 2021____; 2022____;
(If sub-contractor is self-insured, attached proof of EMR stated, showing complete worksheet calculations).

Sub-Contractor is not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency:

NOTE: The penalty for making false statement in offer is prescribed in 18 U.S.C. 1001.

SUBMITTED ON : _____ Day of _____, 20____

Signature of General Contractor

Name of General Contractor (Print)

Title of General Contractor (Print)

Date

Certification of Payments to Influence Federal Transactions

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

CONTRACT DOCUMENTS C.7

Public reporting burden for this information collection is estimated to average 30 minutes. This includes the time for collecting, reviewing, and reporting data. The information requested is required to obtain a benefit. This form is used to ensure federal funds are not used to influence members of Congress. There are no assurances of confidentiality. HUD may not conduct or sponsor, and an applicant is not required to respond to a collection of information unless it displays a currently valid OMB control number.

Applicant Name

Program/Activity Receiving Federal Grant Funding

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 an 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) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all sub recipients shall certify and disclose accordingly.

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.

I hereby certify that all the information stated herein, as well as any information provided in the accompaniment herewith, is true and accurate.

Warning: HUD will prosecute false claims and statements. Conviction may result in criminal and/or civil penalties. (18 U.S.C. 1001, 1010, 1012; 31 U.S.C. 3729, 3802)

Name of Authorized Official

Title

Signature

Date (mm/dd/yyyy)

DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C.1352

Approved by OMB

4040-0013

1. * Type of Federal Action: <input checked="" type="checkbox"/> a. contract <input type="checkbox"/> b. grant <input type="checkbox"/> c. cooperative agreement <input type="checkbox"/> d. loan <input type="checkbox"/> e. loan guarantee <input type="checkbox"/> f. loan insurance	2. * Status of Federal Action: <input checked="" type="checkbox"/> a. bid/offer/application <input type="checkbox"/> b. initial award <input type="checkbox"/> c. post-award	3. * Report Type: <input checked="" type="checkbox"/> a. initial filing <input type="checkbox"/> b. material change
--	--	--

4. Name and Address of Reporting Entity:

Prime SubAwardee

* Name: [Redacted]

* Street 1: [Redacted] Street 2: []

* City: [Redacted] State: [] Zip: []

Congressional District, if known: []

5. If Reporting Entity in No.4 is Subawardee, Enter Name and Address of Prime:

[Redacted]

6. * Federal Department/Agency: [Redacted]	7. * Federal Program Name/Description: [Redacted]
	CFDA Number, if applicable: []

8. Federal Action Number, if known: []	9. Award Amount, if known: \$ []
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10. a. Name and Address of Lobbying Registrant:

Prefix [] * First Name [Redacted] Middle Name []

* Last Name [Redacted] Suffix []

* Street 1 [] Street 2 []

* City [] State [] Zip []

b. Individual Performing Services (including address if different from No. 10a)

Prefix [] * First Name [Redacted] Middle Name []

* Last Name [Redacted] Suffix []

* Street 1 [] Street 2 []

* City [] State [] Zip []

11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when the transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

* Signature: [Redacted]

* Name: Prefix [] * First Name [Redacted] Middle Name []

* Last Name [Redacted] Suffix []

Title: [] Telephone No.: [] Date: [Redacted]



CERTIFICATION OF COMPLIANCE WITH WASHINGTON STATE WAGE PAYMENT STATUTES

The Bidder hereby certifies that, within the three year period immediately preceding the bid solicitation date of _____, that the Bidder is not a “willful” violator, as defined in RCW 49.48.082, of any provision of chapters 49.46, 49.48 or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the WA State Department of Labor & Industries of through a civil judgement entered by a court of limited or general jurisdiction.

I certify under penalty of perjury under the laws of the State of Washington that the forgoing is true and correct.

Bidder

Signature of Authorized Official*

Printed name

Title

_____ _____ _____
Date City State

Check one:
Individual Partnership Joint Venture Corporation

State of Incorporation, or if not a corporation, State where business entity was formed:

If a co-partnership, give company name under which business is transacted:

*If a corporation, this Certification must be executed in the corporate name by the president or vice president (Or any other coporate officer accompanied by evidence of authority to sign). If a co-partnership, Certification must be executed by a partner.

Vendor Set-up Form (Alternative W-9)

FOR KCHA USE ONLY	Submitted by: _____	Vendor Number: _____	Date: _____
--------------------------	---------------------	----------------------	-------------

Name (as shown on your income tax return): _____

Business name/disregard entity name, **if different from above**: _____

Check appropriate box for Federal tax classification (required):

<input type="checkbox"/> Individual	<input type="checkbox"/> S Corporation	<input type="checkbox"/> Trust/Estate	<input type="checkbox"/> Other (see instructions)
<input type="checkbox"/> C Corporation	<input type="checkbox"/> Partnership	<input type="checkbox"/> Exempt Payee	
<input type="checkbox"/> Limited Liability Company (LLC). Enter the tax classification (C=C corporation, S=S Corporation, P=Partnerships)			>> _____

1099 Address (number, street, and apt. or suite no.): _____	City, State, and Zip Code: _____	Telephone: _____
---	----------------------------------	------------------

Remit to address (if different from above): _____	City, State, and Zip Code: _____	Email: _____
---	----------------------------------	--------------

Taxpayer Identification Number (TIN)	PROVIDE ONE ONLY
Enter your TIN in the appropriate box. The TIN provided must match the name given on the "Name" line to avoid backup withholding. For individuals, this is your social security number (SSN). For other entities, it is your employer identification number (EIN).	SSN: _____
	EIN: _____

Terms of Payment

<input type="checkbox"/> Net 30	<input type="checkbox"/> Net 10th of Month	<input type="checkbox"/> Other _____
<input type="checkbox"/> Net 10	<input type="checkbox"/> Due upon receipt	

***Section-3:** Yes No *Questions can be directed to KCHA Section 3 Coordinator 206-826-5335

WMBE: MINORITY OWNED (MBE OR MWBE) WOMEN OWNED (WBE) Not Applicable

<input type="checkbox"/> 1. White American	<input type="checkbox"/> 4. Hispanic American	<input type="checkbox"/> NONE OF THE ABOVE (NEC)
<input type="checkbox"/> 2. Black American	<input type="checkbox"/> 5. Asian Pacific American	<input type="checkbox"/> Other _____
<input type="checkbox"/> 3. Native American	<input type="checkbox"/> 6. Hasidic Jew	

Certification

Under the penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: a) I am exempt from backup withholding, or b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person. See instructions

Certification Instructions: You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition of abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments to other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN.

The IRS does not require your consent to any provision of this document other than the certification required to avoid backup withholding.

SIGN HERE	Signature of U.S. Person: _____	Date: _____
------------------	---------------------------------	-------------

Return completed form to King County Housing Authority, 600 Andover Park West, Tukwila, WA 98188

See instructions below or refer to the IRS instructions at www.irs.gov for details on completing this form.

General Instructions:

Purpose of the Form: Establish or update a vendor account with the King County Housing Authority. This form meets the Federal requirements to request a taxpayer identification number (TIN), request certain certifications and claims for exemption, as well as the King County Housing Authority (KCHA) requirements for vendor establishment.

Complete form if:

1. You are a U.S. person (including a resident alien);
2. You are a vendor that provides goods or services to KCHA; AND
3. You will receive payment from KCHA

FINAL AFFIDAVIT OF AMOUNTS PAID

Every Sub-Contract Participant must Complete and Sign a Final Affidavit Form, regardless of tier. Every Prime Participant must Complete and Sign, Certifying the Statement from the Sub-Contract Participant. Notary must witness and verify Prime Participant.

PROJECT NAME / TITLE: _____ **CONTRACT NUMBER:** _____

SCOPE OF WORK: _____

PRIME CONTRACTOR / CONSULTANT: _____ **UBI NUMBER:** _____

ADDRESS-CITY-STATE-ZIP: _____

CONTRACT TYPE: CONSTRUCTION ARCHITECT / ENGINEERING CONSULTANT OTHER: _____

ORIGINAL CONTRACT AMOUNT: \$ _____

TOTAL # OF AMENDMENTS: (____) \$ _____

TOTAL # OF CHANGE ORDERS: (____) \$ _____

FINAL CONTRACT AMOUNT: \$ _____ 0.00

SUB - CONTRACT PARTICIPANT :

CHECK BOX THAT APPLIES: SUB-CONTRACTOR SUB - CONSULTANT MATERIALS SUPPLIER

ENTER NAME AND ADDRESS OF COMPANY	UBI NUMBER	DATE WORK COMPLETED	SUB-CONTRACT AMOUNT	AMOUNTS IN RETAINAGE TO DATE	AMOUNT PAID TO DATE

I, the Undersigned, do hereby certify that all taxes and other fees imposed upon my company, by Labor & Industries, Employment Security, and Department of Revenue have been paid and all accounts **are in good standing**. I further certify that all employees and Sub-Contractors, Sub-Consultants and Materials Suppliers who have worked under my company on this project **have been paid in full**, except for any retainage that is agreed upon under a Sub-Contract. I acknowledge receipt of payment as indicated in this form.

NAME OF COMPANY: _____

PRINT NAME OF AUTHORIZED PERSON _____ TITLE _____ SIGNATURE _____ DATE _____

The **Sub-Contractor Participant** above has signed upon receipt for amounts paid. I, the undersigned, do hereby certify that in connection with all work on the project for which this statement is submitted, by the Sub-Contract Participant named above has been paid the amount shown for work completed or portions thereof listed.

PRIME PARTICIPANT Signature / Title: _____ **DATE:** _____

Subscribed and Sworn before me this _____ day of _____ 20____.

Notary Public in and for the State of Washington.

(PRINT NAME)

Notary
Seal

Residing at: _____

Signature: _____



SECTION 3 – INDIVIDUAL CERTIFICATION FORM

Section 3 of the Housing and Urban Development (HUD) Act of 1968, as amended, requires that Housing Authorities and agencies receiving HUD funding, to the greatest extent feasible, provide economic opportunities to low-income persons. **Information provided on this form shall remain confidential and be used for reporting purposes only. Print all information**

NAME: _____

ADDRESS: _____

EMAIL ADDRESS: _____ PHONE NUMBER: _____

HIRE DATE: _____ POSITION TITLE: _____

EMPLOYER / COMPANY NAME: _____

PROJECT NAME: _____

1. I am a resident in a KCHA Property. _____ Yes _____ No

Property Name: _____

2. I am currently in KCHA’s Section 8 Program. _____ Yes _____ No

3. I am currently a participant in a HUD YouthBuild Program. _____ Yes _____ No

4. County and Income Details (*check appropriated boxes*):

a. I live in **KITSAP COUNTY** and

My **TOTAL** income for the past 12 months was: (*check appropriate box*)

____ Below or Equal to \$57,650 _____ Greater than \$57,650

b. I live in **KING or SNOHOMISH COUNTY** and

My **TOTAL** income for the past 12 months was: (*check appropriate box*)

____ Below or Equal to \$66,750 _____ Greater than \$66,750

c. I live in **PIERCE COUNTY** and

My **TOTAL** income for the past 12 months was: (*check appropriate box*)

____ Below or Equal to \$56,850 _____ Greater than \$56,850

d. I live in **SKAGIT COUNTY** and

My **TOTAL** income for the past 12 months was: (*check appropriate box*)

____ Below or Equal to \$48,250 _____ Greater than \$48,250

e. I live in **THURSTON COUNTY** and

My **TOTAL** income for the past 12 months was: (*check appropriate box*)

____ Below or Equal to \$56,500 _____ Greater than \$56,500



f. I live in _____ COUNTY and
My **TOTAL** income for the past 12 months was: \$ _____

5. In the past five years, I have been a resident of public housing or
Section 8 assisted housing managed by KCHA; a resident of other
public housing projects or Section 8 assisted housing, or a _____ Yes _____ No
YouthBuild participant.

I hereby certify under the **penalty of perjury** that the information above is true and correct.

Signature

Date

If submitting for a new hire, attach completed forms to Labor Hours Benchmark Status Report and submit to project manager. If submitting for Section 3 business qualification, attach to Section 3 Business Certification Form. For questions, please contact KCHA by email at section3@kcha.org.

SECTION 3 – INDIVIDUAL CERTIFICATION FORM FAQ's

Question: What is this form?

Answer: This form is a Section 3 Certification Form that will be used to determine if an individual is a Section 3 worker as defined by HUD 24 CFR 75 and the KCHA.

Question: Who fills out this form?

Answer: Any individual who is paid in full or part with HUD funds. (If unsure if position is HUD funded, please contact Contract administrator.)

Question: What will this form be used for?

Answer: This form will be used for the purpose of determining Section 3 eligibility and for statistical purposes.

Question: Who collects this form and where does it go?

Answer: Any employer or contractor that has a contract with the KCHA that is HUD funded will collect this data from any employee who was employed within the last five years. Once the data is collected the original copy will come to KCHA.

Question: Who is a KCHA Resident?

Answer: Someone who lives in a KCHA Housing Development whose name is listed on a current lease.

Question: How long should I go back to calculate my income?

Answer: Individuals should calculate back 12 months from their date of hire.

Question: What if I don't live in King County?

Answer: Individuals who do not reside in King County may still be eligible to be certified by KCHA as a Section 3 resident.

If you have more specific questions, please contact KCHA at section3@kcha.org.



SECTION 3 – LABOR HOURS BENCHMARK REPORT - INSTRUCTIONS

Complete the Labor Hours Benchmark Status Report as indicated below and return the completed form along with the pay application(s) for the same period.

Return the Labor Hours Benchmark Status Report and pay application to:

King County Housing Authority
700 Andover Park West
Tukwila, WA 98188

Attn: _____

Email: _____

REPORT LINES:

- 1) Name of the project as it appears on the Contract
- 2) Company Name
- 3) Name of the person filling out the Labor Hours Benchmark Status Report
- 4) Phone number of the person filling out the Labor Hours Benchmark Status Report
- 5) Email address of the person filling out the Labor Hours Benchmark Status Report
- 6) Contract number as it appears on the Contract
- 7) Contract Award date (date of Letter of Award)
- 8) Reporting Period – should be the same as the pay application period
- 9) Total hours worked by all workers on the project – this will be everyone that is listed on the certified payrolls during Reporting Period.
- 10) Total hours worked on the project by Section 3 workers during the Reporting Period.

A Section 3 worker is identified as:

- a. The worker's income for the previous or annualized calendar year is below the income limit established by HUD; or
- b. Is employed by a Section 3 business concern; or
- c. Is a YouthBuild participant.

These will be the workers identified as Section 3 employees upon the submittal of their Section 3 Individual Certification Form at the beginning of the project OR when they were brought onto the project. A copy of these forms should be available from your company's payroll office. Copies can also be obtained by submitting a request to section3@kcha.org. Please include your company's name, project name and contact information.

- 11) Total hours worked on the project by Targeted Section 3 workers during the Reporting Period.

A Targeted Section 3 worker is identified as:

- a. Employed by a Section 3 business concern; or
- b. Is a resident of public housing or Section 8 assisted housing; or
- c. Resides within one mile of the project site.

These workers will be identified as Targeted Section 3 employees upon the submittal of their Section 3 Individual Certification Form at the beginning of the project OR when they were brought onto the project. A copy of these forms should be available from your company's payroll office. Copies can also be obtained by submitting a request to section3@kcha.org. Please include your company's name, project name and contact information.

See sample scenarios on pgs. 3 & 4



SECTION 3 – LABOR HOURS BENCHMARK REPORT

GENERAL INFORMATION

- 1) PROJECT NAME: _____
- 2) COMPANY NAME: _____
- 3) CONTACT PERSON: _____
- 4) CONTACT PHONE NO.: _____
- 5) CONTACT EMAIL ADDRESS: _____
- 6) CONTRACT NO.: _____ 7) CONTRACT AWARD DATE: _____

SECTION 3 LABOR HOUR BENCHMARKS

- 8) REPORTING PERIOD: FROM: _____ TO: _____

The totals below are for YOUR COMPANY ONLY and JUST THOSE WORKERS WORKING ON THE PROJECT SITE.

- 9) **TOTAL LABOR HOURS FOR ALL WORKERS ON THE PROJECT DURING THE REPORTING PERIOD** *(onsite work crew)*: _____
- 10) **TOTAL LABOR HOURS FOR ALL SECTION 3 WORKERS ON THE PROJECT DURING THE REPORTING PERIOD** *(onsite work crew who self-certified as Section 3 Workers)*: _____
- 11) **TOTAL LABOR HOURS FOR ALL TARGETED SECTION 3 WORKERS ON THE PROJECT DURING THE REPORTING PERIOD** *(onsite work crew who self-certified as Targeted Section 3 Workers)*: _____

I certify that the information in this report is true and correct to the best of my knowledge:

SIGNATURE	TITLE
PRINT NAME	DATE

To be completed by KCHA Staff RECEIVED BY:	
SIGNATURE	TITLE
PRINT NAME	DATE



SCENARIO 1:

A crew of 5 none of whom self-certified as a Section 3 worker.

Reporting period is from June 1 to June 30, 2022.

The total hours that the crew worked on the project site during the reporting period totaled 1,000.

SECTION 3 LABOR HOUR BENCHMARKS

8) REPORTING PERIOD: FROM: 6-1-22 TO: 6-30-22

The totals below are for YOUR COMPANY ONLY and JUST THOSE WORKERS WORKING ON THE PROJECT SITE.

9) **TOTAL LABOR HOURS FOR ALL WORKERS ON THE PROJECT DURING THE REPORTING PERIOD** (*onsite work crew*): 1000

10) **TOTAL LABOR HOURS FOR ALL SECTION 3 WORKERS ON THE PROJECT DURING THE REPORTING PERIOD** (*onsite work crew who self-certified as Section 3 Workers*): 0

11) **TOTAL LABOR HOURS FOR ALL TARGETED SECTION 3 WORKERS ON THE PROJECT DURING THE REPORTING PERIOD** (*onsite work crew who self-certified as Targeted Section 3 Workers*): 0

SCENARIO 2:

A crew of 5, two of whom self-certified as Section 3 workers.

Reporting period is from June 1 to June 30, 2022.

The total hours that the crew worked on the project site during the reporting period totaled 1,000.

The total hours of the two that self-certified as Section 3 workers during the reporting period totaled 80.

SECTION 3 LABOR HOUR BENCHMARKS

8) REPORTING PERIOD: FROM: 6-1-22 TO: 6-30-22

The totals below are for YOUR COMPANY ONLY and JUST THOSE WORKERS WORKING ON THE PROJECT SITE.

9) **TOTAL LABOR HOURS FOR ALL WORKERS ON THE PROJECT DURING THE REPORTING PERIOD** (*onsite work crew*): 1000

10) **TOTAL LABOR HOURS FOR ALL SECTION 3 WORKERS ON THE PROJECT DURING THE REPORTING PERIOD** (*onsite work crew who self-certified as Section 3 Workers*): 80

11) **TOTAL LABOR HOURS FOR ALL TARGETED SECTION 3 WORKERS ON THE PROJECT DURING THE REPORTING PERIOD** (*onsite work crew who self-certified as Targeted Section 3 Workers*): 0



SCENARIO 3:

A crew of 5, one of whom self-certified as a Section 3 worker and the other as a Targeted Section 3 worker. Reporting period is from June 1 to June 30.

The total hours that the crew worked on the project site during the reporting period totaled 1,000.

The total hours of the one that self-certified as a Section 3 worker during the reporting period totaled 40.

The total hours of the one that self-certified as a Targeted Section 3 worker during the reporting period totaled 40.

SECTION 3 LABOR HOUR BENCHMARKS

8) REPORTING PERIOD: FROM: 6-1-22 TO: 6-30-22

The totals below are for YOUR COMPANY ONLY and JUST THOSE WORKERS WORKING ON THE PROJECT SITE.

9) TOTAL LABOR HOURS FOR ALL WORKERS ON THE PROJECT DURING THE REPORTING PERIOD (*onsite work crew*): 1000

10) TOTAL LABOR HOURS FOR ALL SECTION 3 WORKERS ON THE PROJECT DURING THE REPORTING PERIOD (*onsite work crew who self-certified as Section 3 Workers*): 40

11) TOTAL LABOR HOURS FOR ALL **TARGETED** SECTION 3 WORKERS ON THE PROJECT DURING THE REPORTING PERIOD (*onsite work crew who self-certified as Targeted Section 3 Workers*): 40

SCENARIO 4:

A crew of 5, (in this scenario, it does not matter if there are Section 3 workers or not) Reporting period is from June 1 to June 30, 2022.

The total hours that the crew worked on the project during the reporting period totaled ZERO.

SECTION 3 LABOR HOUR BENCHMARKS

8) REPORTING PERIOD: FROM: 6-1-22 TO: 6-30-22

The totals below are for YOUR COMPANY ONLY and JUST THOSE WORKERS WORKING ON THE PROJECT SITE.

9) TOTAL LABOR HOURS FOR ALL WORKERS ON THE PROJECT DURING THE REPORTING PERIOD (*onsite work crew*): 0

10) TOTAL LABOR HOURS FOR ALL SECTION 3 WORKERS ON THE PROJECT DURING THE REPORTING PERIOD (*onsite work crew who self-certified as Section 3 Workers*): 0

11) TOTAL LABOR HOURS FOR ALL **TARGETED** SECTION 3 WORKERS ON THE PROJECT DURING THE REPORTING PERIOD (*onsite work crew who self-certified as Targeted Section 3 Workers*): 0

YES, A LABOR HOUR BENCH MARK FORM HAS TO BE SUBMITTED EVEN IF NO WORK IS PERFORMED BUT THE GC/SUB (ALL TIERS) HAVE NOT FINISHED THE PROJECT.



D - SECTION

THIRD PARTY REPORTS

- D.1 2012 Eastridge House Lead Based Paint and Risk Assessment Report**
- D.2 2013 Eastridge House Limited Hazardous Materials Report**
- D.3 Eastridge House Fire Alarm Code Analysis**
- D.4 2021 Eastridge House Fire Alarm Site Report**



Engineering +
Environmental

Lead-Based Paint Inspection and Risk Assessment Report

Eastridge House
120 West Sunset Way
Issaquah, Washington

Prepared for:

Deborah McCaslin
King County Housing
625 Andover Park
Tukwila, WA 98188

May 3, 2012
Project No. 40573.071

**LEAD-BASED PAINT INSPECTION AND
RISK ASSESSMENT**

King County Housing Authority
Eastridge House
Issaquah, Washington

Prepared for:

King County Housing Authority
625 Andover Park West
Tukwila, Washington 98188

This lead-based paint inspection and risk assessment is for the exclusive use of the client and/or building owner and is not to be photographed, photocopied, or similarly reproduced in total or in part without the expressed written consent of the client and/or building owner.

Prepared by
PBS Engineering + Environmental
2517 Eastlake Avenue East, Suite 100
Seattle, Washington 98102
206.233.9639

LEAD-BASED PAINT INSPECTION AND RISK ASSESSMENT
KING County Housing Authority
Eastridge House
Issaquah, Washington

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SUPPORTING DATA

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XRF Data Sheets
Bulk Paint Chip Samples Results

TAB 2 – CERTIFICATIONS

Risk Assessor
PBS Engineering + Environmental
Analytical Laboratory

1.0 IDENTIFYING INFORMATION

BUILDING DATA

Eastridge House
120 West Sunset Way
Issaquah, WA 98027

CLIENT DATA

King County Housing Authority
625 Andover Park West
Tukwila, Washington 98188

Attn: Ms. Deborah McCaslin

SCOPE OF ASSESSMENT

PBS Engineering + Environmental (PBS) conducted a lead-based paint inspection and risk assessment on April 27th and 30th, 2012, in accordance with the U.S. Department of Housing and Urban Development (HUD) Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing. Twenty-four units in the building were randomly selected to be included in the inspection and risk assessment. The halls, stairwells, laundry rooms, offices, restrooms, janitor's closets, shop and maintenance shed were also included in the scope.

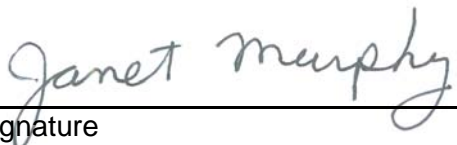
DWELLING SELECTION PROCESS

The client provided access and input in the unit selection process. Unit selection here was partly based on tenant agreement.

CERTIFICATIONS

Risk Assessor

Janet Murphy
State of Washington
Department of Community, Trade and Economic Development
Risk Assessor Certification No: 0258 Expiration Date:3/8/2013



Signature

May 3, 2012

Date

Certifying Firm

PBS Engineering + Environmental
2517 Eastlake Avenue East
Seattle, Washington 98102
Telephone: 206.223.9639

Certification No: 0178
Expiration Date: 9/3/2013

Certified Laboratory

NVL Laboratories, Inc
4708 Aurora Avenue North
Seattle, Washington 98102
Telephone: 206.547.0100

AIHA NLLAP Certification No: 101861

2.0 LEAD PAINT INSPECTION

2.1 Site Information

The building is a 40-unit, three story apartment building constructed in 1971. The building is of wood construction with gypsum interior walls and ceilings. The exterior is brick with wood trim. Apartment units are studio or one bedroom each with a bathroom and a kitchen/living room area. The building is in good condition.

The majority of the interior surfaces are painted. Walls are painted gypsum wallboard. Bathroom walls have ceramic tile or laminate inserts around tubs. Door frames are medium-density fiberboard (MDF) or metal with factory-painted coatings. The doors are painted wood or metal. The window frames are unpainted aluminum.

2.2 Lead-Based Paint Inspection and Sampling

The presence of lead in paint was determined through two methods, x-ray fluorescence spectroscopy and paint chip sampling.

2.2.1 XRF Sampling

A handheld INNOV-X Systems Inc. X-Ray Fluorescence Analyzer (XRF) operating in lead paint mode was used to perform a surface by surface lead paint inspection of each selected unit and building.

HUD and Environmental Protection Agency (EPA) have set 1.0 milligrams per square centimeter (mg/cm^2) as the threshold limit for lead-based paint as determined through X-Ray Fluorescence (XRF) testing. HUD and EPA have set 5,000 parts per million (ppm), or 0.5 percent by atomic absorption laboratory analysis as the threshold limit for lead-based paint. Paint that is known to contain lead levels less than those described above does not have to be evaluated, although all deteriorated paint (paint surfaces in poor condition) should be repaired because it may contain lower levels of lead that may contribute to lead dust or lead contaminated soil hazards.

All calibration readings were within the tolerance for this instrument. No substrate correction is required with the INNOV-X Systems XRF per the instrument's performance characteristic sheet.

The "Side" information presented on the XRF data sheets is in relation to the side of the rooms, or building exteriors where the XRF test spot is located. The inspector/risk assessor used the north side of each residence as the basis to establish side "A". Sides B, C, and D follow in clockwise rotation.

Please refer to the XRF sample data table for the complete list of XRF samples located in Tab 1.

2.2.2 Bulk Paint-Chip Sampling

Bulk paint chip verification samples were collected from selected painted surfaces. Paint chip samples were submitted to a qualified lab for analysis by atomic absorption, EPA Method 7000. Bulk paint chip sample laboratory results are located in Tab 1.

2.3 Components with Lead-Based Paint

Lead was not found in any painted components above the HUD level of 1.0mg/cm² by XRF or 0.5% by flame atomic absorption spectrometry (FAAS).

2.4 Deteriorated Lead-Based Paint Surfaces

Painted surfaces were evaluated to be in an intact or fair condition. It was determined that no lead was present in any areas tested.

Residential Sampling for Lead: Protocols for Dust and Soil Sampling. All samples were analyzed using EPA Method SW846-7000B, Flame Atomic Absorption.

The EPA/HUD threshold for bare residential soil is 1,200 parts per million (ppm) and for child's play areas is 400 ppm.

Analysis of the composite soil samples collected from the exterior drip lines of selected buildings revealed lead in soil below the EPA/HUD threshold for bare residential soil. Lead soil sample chain-of-custody and lab reports are located under Tab 1. There were no playground areas in the complex for soil sampling.

3.0 LEAD-BASED PAINT RISK ASSESSMENT

3.1 Locations and Types of Lead Hazards Identified

Lead hazards were not identified at this facility. Lead was not found in any painted components above the HUD level of 1.0mg/cm² by XRF or 0.5% by flame atomic absorption spectrometry (FAAS).

3.2 Dust Sample Results

The purpose of dust sampling is to determine the lead concentration in settled dust. Dust is an important pathway for childhood exposure to lead. Children can be exposed to leaded dust by inhalation or ingestion. Ingestion of leaded dust is a common pathway during normal hand to mouth activities involving their fingers, or toys that have come in contact with leaded dust. Wipe sampling is the recommended method for collecting surface dust samples. Dust samples are typically collected from floors near friction and impact spots or areas of deteriorated paint, interior window sills, and window wells. Cabinets, shelves, and table tops may also be sampled if there is reason to suspect a surface dust hazard may exist caused by friction, impact points, or from areas of deteriorated paint nearby.

Dust wipes were collected in accordance with EPA 747-R-95-001, Residential Sampling for Lead: Protocols for Dust and Soil Sampling. All wipe samples were analyzed using EPA Method SW846-7000B, Flame Atomic Absorption.

HUD has established the following threshold limits for lead in settled dust in target housing: 40 µg/ft² on floors, 250 µg/ft² on window sills, and 400 µg/ft² in window wells.

Results of the single surface dust sampling conducted during this assessment revealed lead concentrations below EPA/HUD lead standards indicating that lead hazards do not exist as discussed above. The following table lists the locations and findings from lead dust wipe sampling.

PBS Sample #	Surface	Sample Location	Results (µg/sq. ft)
40573.071 W-1	Sill	Unit 105 Bedroom	<18.0
40573.071 W-2	Floor	Unit 107 Kitchen	<36.0
40573.071 W-3	Floor	Unit 312 Bedroom	<18.0
40573.071 W-4	Floor	Unit 206 Kitchen	<36.0
40573.071 W-5	Floor	Unit 306 Kitchen	<18.0
40573.071 W-6	Sill	Unit 306 Bedroom	<18.0

3.3 **Soil Samples**

Composite soil sampling was conducted around the foundation or “drip line” of the buildings and from the play area. The soil samples were collected in accordance with EPA 747-R-95-001, Residential Sampling for Lead: Protocols for Dust and Soil Sampling. All samples were analyzed using EPA Method SW846-7000B, Flame Atomic Absorption.

The EPA/HUD threshold for bare residential soil is 1,200 parts per million (ppm).

Analysis of the composite soil samples collected from the exterior drip line of the building revealed lead in soil **below** the EPA/HUD threshold for bare residential soil.

4.0 **LEAD HAZARD CONTROL**

4.1 **Definitions**

Lead-based paint hazards have not been identified at this site. Lead-based paint was not identified at this property.

4.2 **Program Development**

A lead hazard control program is not required to be established for this property.

TAB 1

Lab Reports and Sample Data Sheets

XRF Data Sheets

Bulk Sample Analyses

Reading	Mode	Pass/Fail	Pass Fail Standard	Pb	Room	Component	Substrate	Condition	Color
1	Standardization	-0.011613	PASS				Test		
2	Calibration	surface	Negative	0.99			Test		
3	Calibration	surface	Positive	1.11			Test		
4	Standardization	-0.012951	PASS				Test		
5	Calibration	surface	Positive	1.02			Test		
6	Calibration	surface	Positive	1.05			Test		
7	Calibration	surface	Positive	1.01			Test		
1st Floor Janitor's Closet									
8	Lead Paint Fixed-Time		Negative	0	1st flr janitor's closet	Wall A	Gypsum wallboard	Good	White
9	Lead Paint Fixed-Time		Negative	0	1st flr janitor's closet	Wall B	Gypsum wallboard	Good	White
10	Lead Paint Fixed-Time		Negative	0	1st flr janitor's closet	Wall C	Gypsum wallboard	Good	White
11	Lead Paint Fixed-Time		Negative	0	1st flr janitor's closet	Wall D	Gypsum wallboard	Good	White
12	Lead Paint Fixed-Time		Negative	0	1st flr janitor's closet	Ceiling	Gypsum wallboard	Good	White
13	Lead Paint Fixed-Time		Negative	0	1st flr janitor's closet	Door	Wood	Good	White
14	Lead Paint Fixed-Time		Negative	0	1st flr janitor's closet	Door frame	Metal	Good	White
1st Floor Stairwell W									
15	Lead Paint Fixed-Time	surface	Negative	0.16	1st flr stairwell, west	Rail	Metal	Good	Black
16	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, west	Riser	Wood	Good	Brown
17	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, west	Door	Wood	Good	White
18	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, west	Door frame	Metal	Good	White
19	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, west	Wall A	Gypsum wallboard	Good	White
20	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, west	Wall B	Gypsum wallboard	Good	White
21	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, west	Wall C	Gypsum wallboard	Good	White
22	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, west	Wall D	Gypsum wallboard	Good	White
23	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, west	Ceiling	Gypsum wallboard	Good	White
1st Floor Electrical Rm									
24	Lead Paint Fixed-Time		Negative	0	1st flr electrical room	Wall A	Gypsum wallboard	Good	White
25	Lead Paint Fixed-Time		Negative	0	1st flr electrical room	Wall B	Gypsum wallboard	Good	White
26	Lead Paint Fixed-Time		Negative	0	1st flr electrical room	Wall C	Gypsum wallboard	Good	White
27	Lead Paint Fixed-Time		Negative	0	1st flr electrical room	Wall D	Gypsum wallboard	Good	White
28	Lead Paint Fixed-Time		Negative	0.02	1st flr electrical room	Ceiling	Gypsum wallboard	Good	White
29	Lead Paint Fixed-Time		Negative	0	1st flr electrical room	Door	Wood	Good	White
30	Lead Paint Fixed-Time		Negative	0	1st flr electrical room	Door frame	Metal	Good	White
1st Floor Shop									
31	Lead Paint Fixed-Time		Negative	0	1st flr shop	Wall A	Gypsum wallboard	Good	White
32	Lead Paint Fixed-Time		Negative	0	1st flr shop	Wall B	Gypsum wallboard	Good	White
33	Lead Paint Fixed-Time		Negative	0	1st flr shop	Wall C	Gypsum wallboard	Good	White
34	Lead Paint Fixed-Time		Negative	0	1st flr shop	Wall D	Gypsum wallboard	Good	White
35	Lead Paint Fixed-Time		Negative	0	1st flr shop	Ceiling	Gypsum wallboard	Good	White
36	Lead Paint Fixed-Time		Negative	0	1st flr shop	Door	Wood	Good	White
37	Lead Paint Fixed-Time		Negative	0	1st flr shop	Door frame	Metal	Good	White

Reading	Mode	Pass/Fail	Pass Fail Standard	Pb	Room	Component	Substrate	Condition	Color
1st Floor Hall									
38	Lead Paint Fixed-Time		Negative	0	1st flr hall	Wall A	Gypsum wallboard	Good	White
39	Lead Paint Fixed-Time		Negative	0	1st flr hall	Wall B	Gypsum wallboard	Good	White
40	Lead Paint Fixed-Time		Negative	0	1st flr hall	Wall C	Gypsum wallboard	Good	White
41	Lead Paint Fixed-Time		Negative	0	1st flr hall	Wall D	Wall paper and GWB	Good	White
1st Floor Lobby									
					1st flr lobby	Wall A	No Gypsum wallboard - windows		White
					1st flr lobby	Wall B	Wall paper over Gypsum wallboard		White
					1st flr lobby	Wall C	Wall paper over Gypsum wallboard		White
					1st flr lobby	Wall D	Wall paper over Gypsum wallboard		White
42	Lead Paint Fixed-Time		Negative	0	1st flr lobby	Ceiling	Gypsum wallboard	Good	White
1st Floor Office									
43	Lead Paint Fixed-Time		Negative	0	1st flr office	Wall A	Gypsum wallboard	Good	White
44	Lead Paint Fixed-Time		Negative	0	1st flr office	Wall B	Gypsum wallboard	Good	White
45	Lead Paint Fixed-Time		Negative	0	1st flr office	Wall C	Gypsum wallboard	Good	White
46	Lead Paint Fixed-Time		Negative	0	1st flr office	Wall D	Gypsum wallboard	Good	White
47	Lead Paint Fixed-Time		Negative	0	1st flr office	Ceiling	Gypsum wallboard	Good	White
48	Lead Paint Fixed-Time		Negative	0	1st flr office	Door	Wood	Good	White
49	Lead Paint Fixed-Time		Negative	0	1st flr office	Door frame	Metal	Good	White
Office Vestibule/Waiting Rm									
50	Lead Paint Fixed-Time		Negative	0	Office vestibule /waiting room	Ceiling	Gypsum wallboard	Good	White
51	Lead Paint Fixed-Time		Negative	0	Office vestibule/ waiting room	Wall A	Gypsum wallboard	Good	White
52	Lead Paint Fixed-Time		Negative	0	Office vestibule /waiting room	Wall B	Gypsum wallboard	Good	White
53	Lead Paint Fixed-Time		Negative	0	Office vestibule /waiting room	Wall C	Gypsum wallboard	Good	White
54	Lead Paint Fixed-Time		Negative	0	Office vestibule/ waiting room	Wall D	Gypsum wallboard	Good	White
55	Lead Paint Fixed-Time		Negative	0	Office vestibule /waiting room	Door	Wood	Good	White
56	Lead Paint Fixed-Time		Negative	0	Office vestibule /waiting room	Door frame	Metal	Good	White
1st Floor Elevator Equip Rm									
57	Lead Paint Fixed-Time		Negative	0	1st flr elev equipment room	Wall A	Gypsum wallboard	Good	White
58	Lead Paint Fixed-Time		Negative	0	1st flr elev equipment room	Wall B	Gypsum wallboard	Good	White
59	Lead Paint Fixed-Time		Negative	0.01	1st flr elev equipment room	Wall C	Gypsum wallboard	Good	White
60	Lead Paint Fixed-Time		Negative	0	1st flr elev equipment room	Wall D	Gypsum wallboard	Good	White
61	Lead Paint Fixed-Time		Negative	0	1st flr elev equipment room	Ceiling	Gypsum wallboard	Good	White
62	Lead Paint Fixed-Time		Negative	0	1st flr elev equipment room	Door	Wood	Good	White
63	Lead Paint Fixed-Time		Negative	0	1st flr elev equipment room	Door frame	Metal	Good	White
64	Lead Paint Fixed-Time	surface	Negative	0.08	1st flr elev equipment room	Floor	Concrete	Good	Gray
1st Flr Womens Restroom									
65	Lead Paint Fixed-Time	surface	Negative	0.02	1st flr Women's restroom	Wall A	Gypsum wallboard	Good	White
66	Lead Paint Fixed-Time		Negative	0	1st flr Women's restroom	Wall B	Gypsum wallboard	Good	White
67	Lead Paint Fixed-Time	surface	Negative	0.01	1st flr Women's restroom	Wall C	Gypsum wallboard	Good	White
68	Lead Paint Fixed-Time	surface	Negative	0.01	1st flr Women's restroom	Wall D	Gypsum wallboard	Good	White
69	Lead Paint Fixed-Time	surface	Negative	0.01	1st flr Women's restroom	Ceiling	Gypsum wallboard	Good	White

Reading	Mode	Pass/Fail	Pass Fail Standard	Pb	Room	Component	Substrate	Condition	Color
70	Lead Paint Fixed-Time		Negative	0	1st flr Women's restroom	Door	Wood	Good	White
71	Lead Paint Fixed-Time		Negative	0	1st flr Women's restroom	Door frame	Metal	Good	White
72	VOID								
1st Floor Mens Restroom									
73	Lead Paint Fixed-Time	surface	Negative	0.03	1st flr Men's restroom	Wall A	Gypsum wallboard	Good	White
74	Lead Paint Fixed-Time		Negative	0	1st flr Men's restroom	Wall B	Gypsum wallboard	Good	White
75	Lead Paint Fixed-Time		Negative	0.03	1st flr Men's restroom	Wall C	Gypsum wallboard	Good	White
76	VOID								
77	Lead Paint Fixed-Time		Negative	0.01	1st flr Men's restroom	Ceiling	Gypsum wallboard	Good	White
78	Lead Paint Fixed-Time		Negative	0	1st flr Men's restroom	Door	Wood	Good	White
79	Lead Paint Fixed-Time		Negative	0	1st flr Men's restroom	Door frame	Metal	Good	White
80	VOID								
81	Lead Paint Fixed-Time	surface	Negative	0.04	1st flr Men's restroom	Wall D (repeat)	Gypsum wallboard	Good	White
1st Floor Kitchen									
82	Lead Paint Fixed-Time	surface	Negative	0.06	1st flr Kitchen	Wall A	Gypsum wallboard	Good	White
83	Lead Paint Fixed-Time	surface	Negative	0.09	1st flr Kitchen	Wall B	Gypsum wallboard	Good	White
84	Lead Paint Fixed-Time	surface	Negative	0.04	1st flr Kitchen	Wall C	Gypsum wallboard	Good	White
85	Lead Paint Fixed-Time	surface	Negative	0.04	1st flr Kitchen	Wall D	Gypsum wallboard	Good	White
86	Lead Paint Fixed-Time	surface	Negative	0.04	1st flr Kitchen	Ceiling	Gypsum wallboard	Good	White
87	Lead Paint Fixed-Time		Negative	0	1st flr Kitchen	Door	Wood	Good	White
88	Lead Paint Fixed-Time		Negative	0	1st flr Kitchen	Door frame	Metal	Good	White
1st Floor Community Rm									
89	Lead Paint Fixed-Time		Negative	0	1st flr Community room	Ceiling	2'x4' Ceiling Tile	Good	White
90	Lead Paint Fixed-Time		Negative	0	1st flr Community room	Wall A	Gypsum wallboard	Good	White
91	Lead Paint Fixed-Time		Negative	0	1st flr Community room	Wall B	Gypsum wallboard	Good	White
92	Lead Paint Fixed-Time		Negative	0	1st flr Community room	Wall C	Gypsum wallboard	Good	White
93	Lead Paint Fixed-Time		Negative	0	1st flr Community room	Wall D	Gypsum wallboard	Good	White
94	Lead Paint Fixed-Time		Negative	0	1st flr Community room	Door	Wood	Good	White
95	Lead Paint Fixed-Time		Negative	0	1st flr Community room	Door frame	Metal	Good	White
96	Lead Paint Fixed-Time	surface	Negative	0.01	1st flr Community room	Windowsill	Wood	Good	Brown
1st Floor Stairwell N									
97	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, north	Ceiling	Gypsum wallboard	Good	White
98	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, north	Wall A	Gypsum wallboard	Good	White
99	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, north	Wall B	Gypsum wallboard	Good	White
100	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, north	Wall C	Gypsum wallboard	Good	White
101	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, north	Wall D	Gypsum wallboard	Good	White
102	Lead Paint Fixed-Time	surface	Negative	0.08	1st flr stairwell, north	Riser	Wood	Good	Brown
103	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, north	Rail	Metal	Good	Black
Unit 107									
104	Lead Paint Fixed-Time		Negative	0	Kitchen/dining room	Ceiling	Gypsum wallboard	Good	White
105	Lead Paint Fixed-Time		Negative	0	Kitchen/dining room	Wall A	Gypsum wallboard	Good	White
106	Lead Paint Fixed-Time	surface	Negative	0.02	Kitchen/dining room	Wall B	Gypsum wallboard	Good	White

Reading	Mode	Pass/Fail	Pass Fail Standard	Pb	Room	Component	Substrate	Condition	Color
107	Lead Paint Fixed-Time		Negative	0	Kitchen/dining room	Wall C	Gypsum wallboard	Good	White
108	VOID								
109	Lead Paint Fixed-Time		Negative	0	Kitchen/dining room	Closet roll door	Wood	Good	White
110	Lead Paint Fixed-Time		Negative	0	Kitchen/dining room	Kitchen cabinet	Wood	Good	Brown
111	Lead Paint Fixed-Time		Negative	0	Kitchen/dining room	Wall D (repeat)	Gypsum wallboard	Good	White
112	Lead Paint Fixed-Time		Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
113	Lead Paint Fixed-Time		Negative	0.01	Bedroom	Wall A	Gypsum wallboard	Good	White
114	VOID								
115	VOID								
116	Lead Paint Fixed-Time		Negative	0.07	Bedroom	Wall D	Gypsum wallboard	Good	White
117	Lead Paint Fixed-Time		Negative	0	Bedroom	Door	Wood	Good	White
118	Lead Paint Fixed-Time		Negative	0	Bedroom	Door frame	Metal	Good	White
119	Lead Paint Fixed-Time		Negative	0	Bedroom	Windowsill	Wood	Good	White
120	Lead Paint Fixed-Time		Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
121	Lead Paint Fixed-Time		Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
122	Lead Paint Fixed-Time		Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
123	Lead Paint Fixed-Time		Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
124	Lead Paint Fixed-Time		Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
125	Lead Paint Fixed-Time		Negative	0	Bathroom	Door	Wood	Good	White
126	Lead Paint Fixed-Time		Negative	0	Bathroom	Door frame	Metal	Good	White
127	Lead Paint Fixed-Time		Negative	0	Patio	Column	wood	Good	Black
128	Lead Paint Fixed-Time		Negative	0	Patio	Soffit	wood	Good	BlackBlack
129	Lead Paint Fixed-Time		Negative	0	Patio	Trim	wood	Good	Brown
Unit 105									
130	Lead Paint Fixed-Time		Negative	0	Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
131	VOID								
132	Lead Paint Fixed-Time		Negative	0	Kitchen/living room	Wall B	Gypsum wallboard	Good	White
133	Lead Paint Fixed-Time		Negative	0	Kitchen/living room	Wall C	Gypsum wallboard	Good	White
134	Lead Paint Fixed-Time		Negative	0	Kitchen/living room	Wall D	Gypsum wallboard	Good	White
135	Lead Paint Fixed-Time		Negative	0	Back of kitchen	Wall D	Gypsum wallboard	Good	White
136	Lead Paint Fixed-Time		Negative	0	Side of kitchen	Wall C	Gypsum wallboard	Good	White
137	Lead Paint Fixed-Time		Negative	0	Kitchen/living room	Roll closet door	Wood	Good	White
138	Lead Paint Fixed-Time		Negative	0	Kitchen/living room	Kitchen cabinet	Wood	Good	Brown
139	Lead Paint Fixed-Time		Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
140	VOID								
141	Lead Paint Fixed-Time		Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
142	Lead Paint Fixed-Time		Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
143	Lead Paint Fixed-Time		Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
144	Lead Paint Fixed-Time		Negative	0	Bedroom	Windowsill	Wood	Good	White
145	Lead Paint Fixed-Time		Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
146	Lead Paint Fixed-Time		Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
147	Lead Paint Fixed-Time		Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White

Reading	Mode	Pass/Fail	Pass Fail Standard	Pb	Room	Component	Substrate	Condition	Color
148	Lead Paint Fixed-Time		Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
149	Lead Paint Fixed-Time		Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
150	Lead Paint Fixed-Time		Negative	0	Bathroom	Door	Wood	Good	White
151	Lead Paint Fixed-Time		Negative	0	Bathroom	Door frame	Metal	Good	White

Reading	Mode	Pass Fail Standard	Pb	Room	Component	Substrate	Condition	Color
2nd Floor W Stairwell								
1	Lead Paint Fixed-Time	Negative	0	2nd flr, west stairwell	Ceiling	Gypsum wallboard	Good	White
2	Lead Paint Fixed-Time	Negative	0	2nd flr, west stairwell	Wall A	Gypsum wallboard	Good	White
3	Lead Paint Fixed-Time	Negative	0	2nd flr, west stairwell	Wall B	Gypsum wallboard	Good	White
4	Lead Paint Fixed-Time	Negative	0	2nd flr, west stairwell	Wall C	Gypsum wallboard	Good	White
5	Lead Paint Fixed-Time	Negative	0	2nd flr, west stairwell	Wall D	Gypsum wallboard	Good	White
6	Lead Paint Fixed-Time	Negative	0	2nd flr, west stairwell	Rail	Metal	Good	Black
7	Lead Paint Fixed-Time	Negative	0	2nd flr, west stairwell	Riser	Wood	Good	Brown
2nd Floor N Stairwell								
8	Lead Paint Fixed-Time	Negative	0	2nd flr, north stairwell	Ceiling	Gypsum wallboard	Good	White
9	Lead Paint Fixed-Time	Negative	0	2nd flr, north stairwell	Wall A	Gypsum wallboard	Good	White
10	Lead Paint Fixed-Time	Negative	0	2nd flr, north stairwell	Wall B	Gypsum wallboard	Good	White
11	Lead Paint Fixed-Time	Negative	0	2nd flr, north stairwell	Wall C	Gypsum wallboard	Good	White
12	Lead Paint Fixed-Time	Negative	0	2nd flr, north stairwell	Wall D	Gypsum wallboard	Good	White
13	Lead Paint Fixed-Time	Negative	0	2nd flr, north stairwell	Rail	Metal	Good	Black
14	Lead Paint Fixed-Time	Negative	0	2nd flr, north stairwell	Riser	Wood	Good	Brown
Unit 107								
15	Lead Paint Fixed-Time	Negative	0	Unit 107	Front door	Wood	Good	White
16	Lead Paint Fixed-Time	Negative	0	Unit 107	Door frame	Metal	Good	White
Unit 105								
17	Lead Paint Fixed-Time	Negative	0	Unit 105	Front door	Wood	Good	White
18	Lead Paint Fixed-Time	Negative	0	Unit 105	Door frame	Metal	Good	White
Unit 201								
19	Lead Paint Fixed-Time	Negative	0	Unit 201	Front door	Wood	Good	White
20	Lead Paint Fixed-Time	Negative	0	Unit 201	Door frame	Metal	Good	White
Unit 202								
21	Lead Paint Fixed-Time	Negative	0	Unit 202	Front door	Wood	Good	White
22	Lead Paint Fixed-Time	Negative	0	Unit 202	Door frame	Metal	Good	White
23	Standardization	PASS				Test		
24	Calibrate	Positive	1.07			Test		
25	Calibrate	Positive	1.01			Test		
26	Calibrate	Positive	1			Test		
27	Calibrate	Negative	0.98			Test		
Unit 201								
28	Lead Paint Fixed-Time	Negative	0	Unit 201 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
29	Lead Paint Fixed-Time	Negative	0	Unit 201 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
30	Lead Paint Fixed-Time	Negative	0	Unit 201 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
31	Lead Paint Fixed-Time	Negative	0	Unit 201 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
32	Lead Paint Fixed-Time	Negative	0	Unit 201 - Kitchen/living room	Wall D	Wood	Good	White
33	Lead Paint Fixed-Time	Negative	0	Balcony	Pole	Wood	Good	Black
34	Lead Paint Fixed-Time	Negative	0	Balcony	Soffit	Wood	Good	Black
35	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White

Reading	Mode	Pass Fail Standard	Pb	Room	Component	Substrate	Condition	Color
36	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
37	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
38	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
39	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
40	Lead Paint Fixed-Time	Negative	0	Bedroom	Windowsill	Wood	Good	White
41	Lead Paint Fixed-Time	Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
42	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
43	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
44	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
45	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
46	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	White
47	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Metal	Good	White
				Unit 203				
48	Lead Paint Fixed-Time	Negative	0	Unit 203 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
49	Lead Paint Fixed-Time	Negative	0	Unit 203 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
50	Lead Paint Fixed-Time	Negative	0	Unit 203 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
51	Lead Paint Fixed-Time	Negative	0	Unit 203 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
52	Lead Paint Fixed-Time	Negative	0	Unit 203 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
53	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
54	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
55	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
56	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
57	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
58	Lead Paint Fixed-Time	Negative	0	Bedroom	Windowsill	Wood	Good	White
59	Lead Paint Fixed-Time	Negative	0	Bedroom	Door	Wood	Good	White
60	Lead Paint Fixed-Time	Negative	0	Bedroom	Door Frame	Wood	Good	White
61	VOID							
62	VOID							
63	Lead Paint Fixed-Time	Negative	0.01	Bathroom	Wall A	Gypsum wallboard	Good	White
64	Lead Paint Fixed-Time	Negative	0.01	Bathroom	Wall B	Gypsum wallboard	Good	White
65	Lead Paint Fixed-Time	Negative	0.01	Bathroom	Wall C	Gypsum wallboard	Good	White
66	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
67	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	Brown
68	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	Brown
69	VOID							
70	Lead Paint Fixed-Time	Negative	0	Balcony	Column	Wood	Good	Brown
				2nd Floor Janitor's Closet				
71	Lead Paint Fixed-Time	Negative	0.02	2nd flr janitor's closet	Ceiling	Gypsum wallboard	Good	White
72	Lead Paint Fixed-Time	Negative	0.03	2nd flr janitor's closet	Wall A	Gypsum wallboard	Good	White
73	Lead Paint Fixed-Time	Negative	0.04	2nd flr janitor's closet	Wall B	Gypsum wallboard	Good	White
74	Lead Paint Fixed-Time	Negative	0.02	2nd flr janitor's closet	Wall C	Gypsum wallboard	Good	White
75	Lead Paint Fixed-Time	Negative	0.03	2nd flr janitor's closet	Wall D	Gypsum wallboard	Good	White

Reading	Mode	Pass Fail Standard	Pb	Room	Component	Substrate	Condition	Color
Unit 202								
76	Lead Paint Fixed-Time	Negative	0	Unit 202 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
77	Lead Paint Fixed-Time	Negative	0	Unit 202 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
78	Lead Paint Fixed-Time	Negative	0.07	Unit 202 - Kitchen/living room	Wall B	Test		
79	Lead Paint Fixed-Time	Negative	0	Unit 202 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
80	Lead Paint Fixed-Time	Negative	0	Unit 202 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
81	Lead Paint Fixed-Time	Negative	0	Unit 202 - Kitchen/living room	Kitchen Cabinet	Wood	Good	Tan
82	Lead Paint Fixed-Time	Negative	0	Unit 202 - Kitchen/living room	Closet door	Wood	Good	White
83	Lead Paint Fixed-Time	Negative	0	Unit 202 - Kitchen/living room	Wall C (back of kitchen)	Gypsum wallboard	Good	White
84	Lead Paint Fixed-Time	Negative	0	Unit 202 - Kitchen/living room	Wall D (side of kitchen)	Gypsum wallboard	Good	White
85	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
86	Lead Paint Fixed-Time	Negative	0	Bedroom	Windowsill	Wood	Good	Brown
87	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
88	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
89	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
90	Lead Paint Fixed-Time	Negative	0.02	Bathroom	Ceiling	Gypsum wallboard	Good	White
91	Lead Paint Fixed-Time	Negative	0.01	Bathroom	Wall A	Gypsum wallboard	Good	White
92	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
93	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
94	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
95	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	Brown
96	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	Brown
97	VOID							
98	Lead Paint Fixed-Time	Negative	0	Deck	Column	Wood	Good	Brown
99	Lead Paint Fixed-Time	Negative	0	Deck	Soffit	Wood	Good	Brown
Unit 204								
100	Lead Paint Fixed-Time	Negative	0	Unit 204 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
101	Lead Paint Fixed-Time	Negative	0	Unit 204 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
102	Lead Paint Fixed-Time	Negative	0	Unit 204 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
103	Lead Paint Fixed-Time	Negative	0	Unit 204 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
104	Lead Paint Fixed-Time	Negative	0	Unit 204 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
105	Lead Paint Fixed-Time	Negative	0	Unit 204 - Kitchen/living room	Wall B (Back of kitchen)	Gypsum wallboard	Good	White
106	Lead Paint Fixed-Time	Negative	0	Unit 204 - Kitchen/living room	Wall C (back of kitchen)	Gypsum wallboard	Good	White
107	Lead Paint Fixed-Time	Negative	0	Balcony	Soffit	Wood	Good	Black
108	Lead Paint Fixed-Time	Negative	0.07	Balcony	Column	Wood	Good	Black
109	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
110	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
111	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
112	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
113	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
114	Lead Paint Fixed-Time	Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
115	Lead Paint Fixed-Time	Negative	0.03	Bathroom	Wall A	Gypsum wallboard	Good	White

Reading	Mode	Pass Fail Standard	Pb	Room	Component	Substrate	Condition	Color	
116	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White	
117	Lead Paint Fixed-Time	Negative	0.05	Bathroom	Wall C	Gypsum wallboard	Good	White	
118	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White	
119	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	White	
120	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Metal	Good	White	
2nd Floor Laundry Room									
121	Lead Paint Fixed-Time	Negative	0.02	2nd flr laundry room	Ceiling	Gypsum wallboard	Good	White	
122	Lead Paint Fixed-Time	Negative	0.02	2nd flr laundry room	Wall A	Gypsum wallboard	Good	White	
123	Lead Paint Fixed-Time	Negative	0.01	2nd flr laundry room	Wall B	Gypsum wallboard	Good	White	
124	Lead Paint Fixed-Time	Negative	0.04	2nd flr laundry room	Wall C	Gypsum wallboard	Good	White	
125	Lead Paint Fixed-Time	Negative	0.03	2nd flr laundry room	Wall D	Gypsum wallboard	Good	White	
126	Lead Paint Fixed-Time	Negative	0	2nd flr laundry room	Door	Wood	Good	White	
127	Lead Paint Fixed-Time	Negative	0	2nd flr laundry room	Door frame	Metal	Good	White	
128	Lead Paint Fixed-Time	Negative	0.02	2nd flr laundry room	Windowsill	Wood	Good	Brown	
2nd Floor Hall									
129	Lead Paint Fixed-Time	Negative	0	2nd flr hall	Wall A	Gypsum wallboard	Good	White	
130	Lead Paint Fixed-Time	Negative	0	2nd flr hall	Wall B	Gypsum wallboard	Good	White	
131	Lead Paint Fixed-Time	Negative	0	2nd flr hall	Wall C	Gypsum wallboard	Good	White	
132	Lead Paint Fixed-Time	Negative	0	2nd flr hall	Wall D	Gypsum wallboard	Good	White	
Unit 209									
133	Lead Paint Fixed-Time	Negative	0	Unit 209 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White	
134	Lead Paint Fixed-Time			Test Canceled					
135	Lead Paint Fixed-Time			Test Canceled					
136	Lead Paint Fixed-Time	Negative	0	Unit 209 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White	
137	Lead Paint Fixed-Time	Negative	0	Unit 209 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White	
138	Lead Paint Fixed-Time	Negative	0	Unit 209 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White	
139	Lead Paint Fixed-Time	Negative	0	Unit 209 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White	
140	Lead Paint Fixed-Time	Negative	0.05	Unit 209 - Kitchen/living room	Wall C (back of kitchen)	Gypsum wallboard	Good	White	
141	Lead Paint Fixed-Time	Negative	0	Unit 209 - Kitchen/living room	Wall D (side of kitchen)	Gypsum wallboard	Good	White	
142	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White	
143	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White	
144	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White	
145	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White	
146	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White	
147	Lead Paint Fixed-Time	Negative	0	Bedroom	Windowsill	Wood	Good	White	
148	VOID								
149	VOID								
150	Lead Paint Fixed-Time	Negative	0	Bathroom	Roll closet door	Wood	Good	White	
151	Lead Paint Fixed-Time	Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White	
152	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White	
153	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White	
154	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White	

Reading	Mode	Pass Fail Standard	Pb	Room	Component	Substrate	Condition	Color
155	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
156	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	White
157	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	White
158	Lead Paint Fixed-Time	Negative	0	Balcony	Pole	Wood	Good	Black
159	Lead Paint Fixed-Time	Negative	0	Balcony	Soffit	Wood	Good	Black
				Unit 210				
160	Lead Paint Fixed-Time	Negative	0	Unit 210 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
161	Lead Paint Fixed-Time	Negative	0	Unit 210 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
162	Lead Paint Fixed-Time	Negative	0	Unit 210 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
163	Lead Paint Fixed-Time	Negative	0	Unit 210 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
164	Lead Paint Fixed-Time	Negative	0	Unit 210 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
165	Lead Paint Fixed-Time	Negative	0	Unit 210 - Kitchen/living room	Wall A (back of kitchen)	Gypsum wallboard	Good	White
166	VOID							
167	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
168	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
169	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
170	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
171	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
172	Lead Paint Fixed-Time	Negative	0	Bedroom	Windowsill	Wood	Good	Brown
173	Lead Paint Fixed-Time	Negative	0.02	Bathroom	Ceiling	Gypsum wallboard	Good	White
174	Lead Paint Fixed-Time	Negative	0.01	Bathroom	Wall A	Gypsum wallboard	Good	White
175	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
176	Lead Paint Fixed-Time	Negative	0.01	Bathroom	Wall C	Gypsum wallboard	Good	White
177	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
178	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	White
179	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	White
180	Lead Paint Fixed-Time	Negative	0	Bedroom	Roll door on closet	Wood	Good	White
181	Lead Paint Fixed-Time	Negative	0	Balcony	Column	Wood	Good	Brown
182	Lead Paint Fixed-Time	Negative	0	Balcony	Soffit	Wood	Good	White
183	Lead Paint Fixed-Time	Negative	0	Balcony	Column	Wood	Good	White
				Unit 211				
184	Lead Paint Fixed-Time	Negative	0	Unit 211 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
185	Lead Paint Fixed-Time	Negative	0	Unit 211 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
186	Lead Paint Fixed-Time	Negative	0	Unit 211 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
187	Lead Paint Fixed-Time	Negative	0.03	Unit 211 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
188	Lead Paint Fixed-Time	Negative	0	Unit 211 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
189	Lead Paint Fixed-Time	Negative	0	Unit 211 - Kitchen/living room	Wall C (back of kitchen)	Gypsum wallboard	Good	White
190	Lead Paint Fixed-Time	Negative	0	Unit 211 - Kitchen/living room	Wall B (back of kitchen)	Gypsum wallboard	Good	White
191	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
192	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
193	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
194	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White

Reading	Mode	Pass Fail Standard	Pb	Room	Component	Substrate	Condition	Color
195	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
196	Lead Paint Fixed-Time	Negative	0.05	Bedroom	Windowsill	Wood	Good	Brown
197	Lead Paint Fixed-Time	Negative	0.07	Bathroom	Ceiling	Gypsum wallboard	Good	White
198	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
199	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
200	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
201	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
202	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	White
203	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	White
204	Lead Paint Fixed-Time	Negative	0	Balcony	Column	Wood	Good	Brown
205	Lead Paint Fixed-Time	Negative	0	Balcony	Soffit	Wood	Good	Brown
				Unit 213				
206	Lead Paint Fixed-Time	Negative	0	Unit 213 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
207	Lead Paint Fixed-Time	Negative	0	Unit 213 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
208	Lead Paint Fixed-Time	Negative	0	Unit 213 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
209	Lead Paint Fixed-Time	Negative	0	Unit 213 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
210	Lead Paint Fixed-Time	Negative	0.02	Unit 213 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
211	Lead Paint Fixed-Time	Negative	0	Unit 213 - Kitchen/living room	Wall C (back of kitchen)	Gypsum wallboard	Good	White
212	Lead Paint Fixed-Time	Insufficient Test Time	0	Unit 213 - Kitchen/living room	Wall D (side of kitchen)	Gypsum wallboard	Good	White
213	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
214	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
215	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
216	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
217	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
218	Lead Paint Fixed-Time	Negative	0.04	Bedroom	Windowsill	Wood	Good	Brown
219	VOID							
220	Lead Paint Fixed-Time	Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
221	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
222	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
223	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
224	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
225	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	White
226	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	White
227	Lead Paint Fixed-Time	Negative	0	Balcony	Column	Wood	Good	Brown
228	Lead Paint Fixed-Time	Negative	0	Balcony	Soffit	Wood	Good	Brown
				Unit 215				
229	Lead Paint Fixed-Time	Negative	0	Unit 215 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
230	Lead Paint Fixed-Time	Negative	0	Unit 215 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
231	Lead Paint Fixed-Time	Negative	0	Unit 215 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
232	Lead Paint Fixed-Time	Negative	0	Unit 215 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
233	Lead Paint Fixed-Time	Negative	0	Unit 215 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
234	VOID							

Reading	Mode	Pass Fail Standard	Pb	Room	Component	Substrate	Condition	Color
235	Lead Paint Fixed-Time	Negative	0	Unit 215 - Kitchen/living room	Wall C (back of kitchen)	Gypsum wallboard	Good	White
236	Lead Paint Fixed-Time	Negative	0	Unit 215 - Kitchen/living room	Wall D (side of kitchen)	Gypsum wallboard	Good	White
237	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
238	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
239	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
240	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
241	Lead Paint Fixed-Time	Negative	0.01	Bathroom	Ceiling	Gypsum Wallboard	Good	White
242	Lead Paint Fixed-Time	Negative	0.02	Bedroom	Wall D	Gypsum wallboard	Good	White
243	Lead Paint Fixed-Time	Negative	0	Bedroom	Windowsill	Wood	Good	Brown
244	Lead Paint Fixed-Time	Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
245	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
246	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
247	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
248	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
249	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	Brown
250	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	Brown
251	Lead Paint Fixed-Time	Negative	0	Balcony	Pole	Wood	Good	Brown
252	Lead Paint Fixed-Time	Negative	0	Balcony	Soffit	Wood	Good	Brown

Reading	Mode	Pass/Fail Standard	Pb	Room	Component	Substrate	Condition	Color
1	Standardization	PASS				Test		
2	Calibrate	Negative	0.93			Test		
3	Calibrate	Negative	0.74			Test		
4	Calibrate	Negative	0.99			Test		
5	Calibrate	Positive	1.12			Test		
6	Calibrate	Negative	0.96			Test		
7	Calibrate	Negative	0.73			Test		
8	Calibrate	Negative	0			Test		
9	Calibrate	Negative	0.96			Test		
10	Calibrate	Negative	0.85			Test		
Building Exterior								
11	Lead Paint Fixed-Time	Negative	0.13	Building Exterior	Plywood under window	Wood	Good	Black
12	Lead Paint Fixed-Time	Negative	0	Building Exterior	Door C	Wood	Good	Black
13	Lead Paint Fixed-Time	Negative	0.07	Building Exterior	Plywood under window	Wood	Good	Black
14	Lead Paint Fixed-Time	Negative	0	Building Exterior	Door C	Wood	Good	Black
15	Lead Paint Fixed-Time	Negative	0	Building Exterior	Bench	Wood	Good	Black
16	Lead Paint Fixed-Time	Negative	0	Building Exterior	Bench	Wood	Good	Black
17	Lead Paint Fixed-Time	Negative	0	Building Exterior	Bench	Wood	Good	Black
Exterior Shed								
18	Lead Paint Fixed-Time	Negative	0	Exterior shed	Wall A	Wood	Good	Tan
19	Lead Paint Fixed-Time	Negative	0	Exterior shed	Wall B	Wood	Good	Tan
20	Lead Paint Fixed-Time	Negative	0	Exterior shed	Wall C	Wood	Good	Tan
21	Lead Paint Fixed-Time	Negative	0	Exterior shed	Wall D	Wood	Good	Tan
22	Lead Paint Fixed-Time	Negative	0	Exterior shed	Door	Metal	Good	White
Unit 206								
23	Lead Paint Fixed-Time	Negative	0	Unit 206 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
24	Lead Paint Fixed-Time	Negative	0	Unit 206 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
25	Lead Paint Fixed-Time	Negative	0	Unit 206 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
26	Lead Paint Fixed-Time	Negative	0.02	Unit 206 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
27	Lead Paint Fixed-Time	Negative	0	Unit 206 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
28	Lead Paint Fixed-Time	Negative	0	Unit 206 - Kitchen/living room	Wall B (back of kitchen)	Gypsum wallboard	Good	White
29	Lead Paint Fixed-Time	Negative	0	Unit 206 - Kitchen/living room	Wall C (back of kitchen)	Gypsum wallboard	Good	White
30	Lead Paint Fixed-Time	Negative	0	Balcony	Column	Wood	Good	Black
31	Lead Paint Fixed-Time	Negative	0	Balcony	Soffit	Wood	Good	Black
32	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
33	Lead Paint Fixed-Time	Negative	0	Balcony	Wall A	Gypsum wallboard	Good	White
34	Lead Paint Fixed-Time	Negative	0	Balcony	Wall B	Gypsum wallboard	Good	White
35	Lead Paint Fixed-Time	Negative	0	Balcony	Wall C	Gypsum wallboard	Good	White
36	Lead Paint Fixed-Time	Negative	0	Balcony	Wall D	Gypsum wallboard	Good	White
37	Lead Paint Fixed-Time	Negative	0.03	Balcony	Windowsill	Wood	Good	Brown
38	VOID							
39	Lead Paint Fixed-Time	Negative	0		Closet door	Wood	Good	White

Reading	Mode	Pass/Fail Standard	Pb	Room	Component	Substrate	Condition	Color
40	Lead Paint Fixed-Time	Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
41	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
42	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
43	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
44	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
45	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	Brown
46	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	Brown
47	VOID							
				Unit 306				
48	Lead Paint Fixed-Time	Negative	0	Unit 306 - Kitchen/living	Wall A	Gypsum wallboard	Good	White
49	Lead Paint Fixed-Time	Negative	0	Unit 306 - Kitchen/living	Wall B	Gypsum wallboard	Good	White
50	Lead Paint Fixed-Time	Negative	0	Unit 306 - Kitchen/living	Wall C	Gypsum wallboard	Good	White
51	Lead Paint Fixed-Time	Negative	0	Unit 306 - Kitchen/living	Wall D	Gypsum wallboard	Good	White
52	Lead Paint Fixed-Time	Negative	0	Unit 306 - Kitchen/living	Wall B (Back of kitchen)	Gypsum wallboard	Good	White
53	Lead Paint Fixed-Time	Negative	0	Unit 306 - Kitchen/living	Wall C (back of kitchen)	Gypsum wallboard	Good	White
54	Lead Paint Fixed-Time	Negative	0	Balcony	Pole	Wood	Good	Black
55	Lead Paint Fixed-Time	Negative	0	Balcony	Soffit	Wood	Good	Black
56	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
57	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
58	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
59	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
60	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
61	Lead Paint Fixed-Time	Negative	0.04	Bedroom	Windowsill	Wood	Good	Brown
62	Lead Paint Fixed-Time	Negative	0.02	Bathroom	Ceiling	Gypsum wallboard	Good	White
63	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
64	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
65	Lead Paint Fixed-Time			Cancelled Test				
66	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
67	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
68	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	Brown
69	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	White
70	VOID							
				Unit 307				
71	Lead Paint Fixed-Time	Negative	0	Unit 307 - Kitchen/living	Ceiling	Gypsum wallboard	Good	White
72	Lead Paint Fixed-Time	Negative	0	Unit 307 - Kitchen/living	Wall A	Gypsum wallboard	Good	White
73	Lead Paint Fixed-Time	Negative	0	Unit 307 - Kitchen/living	Wall B	Gypsum wallboard	Good	White
74	Lead Paint Fixed-Time	Negative	0	Unit 307 - Kitchen/living	Wall C	Gypsum wallboard	Good	White
75	Lead Paint Fixed-Time	Negative	0	Unit 307 - Kitchen/living	Wall D	Gypsum wallboard	Good	White
76	Lead Paint Fixed-Time	Negative	0	Unit 307 - Kitchen/living	Wall D (back of kitchen)	Gypsum wallboard	Good	White
77	Lead Paint Fixed-Time	Negative	0	Unit 307 - Kitchen/living	Wall C (Side of kitchen)	Gypsum wallboard	Good	White
78	VOID							
79	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White

Reading	Mode	Pass/Fail Standard	Pb	Room	Component	Substrate	Condition	Color
80	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
81	Lead Paint Fixed-Time			Cancelled Test		Test		
82	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
83	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
84	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
85	Lead Paint Fixed-Time	Negative	0	Bedroom	Windowsill	Wood	Good	Brown
86	Lead Paint Fixed-Time	Negative	0	Bedroom	Closet door	Wood	Good	White
87	VOID							
88	VOID							
89	Lead Paint Fixed-Time	Negative	0.07	Bathroom	Wall B	Gypsum wallboard	Good	White
90	Lead Paint Fixed-Time	Negative	0.05	Bathroom	Wall C	Gypsum wallboard	Good	White
91	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
92	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	Brown
93	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	Brown
94	Lead Paint Fixed-Time	Negative	0	Bathroom	Door Frame	Wood	Good	White
95	Lead Paint Fixed-Time	Negative	0.96	Bathroom	Tile	Tile	Good	Yellow
96	VOID							
				Unit 304				
97	Lead Paint Fixed-Time	Negative	0	Unit 304 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
98	Lead Paint Fixed-Time	Negative	0	Unit 304 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
99	Lead Paint Fixed-Time	Negative	0	Unit 304 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
100	Lead Paint Fixed-Time	Negative	0	Unit 304 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
101	Lead Paint Fixed-Time	Negative	0	Unit 304 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
102	Lead Paint Fixed-Time	Negative	0	Unit 304 - Kitchen/living room	Wall B (back of kitchen)	Gypsum wallboard	Good	White
103	Lead Paint Fixed-Time	Negative	0	Unit 304 - Kitchen/living room	Wall D (side of kitchen)	Gypsum wallboard	Good	White
104	Lead Paint Fixed-Time	Negative	0	Balcony	Trim	Wood	Good	Brown
105	Lead Paint Fixed-Time	Negative	0	Balcony	Soffit	Wood	Good	Brown
106	Lead Paint Fixed-Time	Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
107	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
108	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
109	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
110	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
111	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	Brown
112	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	Brown
113	Lead Paint Fixed-Time	Negative	0.05	Bedroom	Windowsill	Wood	Good	White
				Unit 302				
114	Lead Paint Fixed-Time	Negative	0	Unit 302 Kitchen/living	Ceiling	Gypsum wallboard	Good	White
115	Lead Paint Fixed-Time	Negative	0	Kitchen/living	Wall A	Gypsum wallboard	Good	White
116	Lead Paint Fixed-Time	Negative	0	Kitchen/living	Wall B	Gypsum wallboard	Good	White
117	Lead Paint Fixed-Time	Negative	0	Kitchen/living	Wall C	Gypsum wallboard	Good	White
118	Lead Paint Fixed-Time	Negative	0	Kitchen/living	Wall D	Gypsum wallboard	Good	White
119	Lead Paint Fixed-Time	Negative	0	Kitchen/living	Wall B (back of kitchen)	Gypsum wallboard	Good	White

Reading	Mode	Pass/Fail Standard	Pb	Room	Component	Substrate	Condition	Color
120	Lead Paint Fixed-Time	Negative	0	Kitchen/living	Wall C (Side of kitchen)	Gypsum wallboard	Good	White
121	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
122	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
123	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
124	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
125	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
126	Lead Paint Fixed-Time	Negative	0	Bedroom	Windowsill	Wood	Good	White
127	Lead Paint Fixed-Time	Negative	0	Bedroom	Closet door	Wood	Good	White
128	Lead Paint Fixed-Time	Negative	0.02	Bathroom	Ceiling	Gypsum wallboard	Good	White
129	Lead Paint Fixed-Time	Negative	0.01	Bathroom	Wall A	Gypsum wallboard	Good	White
130	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
131	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
132	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
133	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	White
134	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	White
				3rd Floor Janitor's Closet				
135	Lead Paint Fixed-Time	Negative	0.01	3rd flr janitor's closet	Ceiling	Gypsum wallboard	Good	White
136	VOID							
137	VOID							
138	Lead Paint Fixed-Time	Negative	0.02	3rd flr janitor's closet	Wall A	Gypsum wallboard	Good	Yellow
139	Lead Paint Fixed-Time	Negative	0.01	3rd flr janitor's closet	Wall B	Gypsum wallboard	Good	Yellow
140	Lead Paint Fixed-Time	Negative	0.02	3rd flr janitor's closet	Wall C	Gypsum wallboard	Good	Yellow
141	Lead Paint Fixed-Time	Negative	0.02	3rd flr janitor's closet	Wall D	Gypsum wallboard	Good	Yellow
142	Lead Paint Fixed-Time	Negative	0	3rd flr janitor's closet	Door	Wood	Good	White
143	Lead Paint Fixed-Time	Negative	0	3rd flr janitor's closet	Door frame	Metal	Good	White
				3rd Floor Hall Wall				
144	Lead Paint Fixed-Time	Negative	0	3rd flr Hall wall	Wall A	Gypsum wallboard	Good	Yellow
145	Lead Paint Fixed-Time	Negative	0	3rd flr Hall wall	Wall B	Gypsum wallboard	Good	Yellow
146	Lead Paint Fixed-Time	Negative	0	3rd flr Hall wall	Wall C	Gypsum wallboard	Good	Yellow
147	Lead Paint Fixed-Time	Negative	0	3rd flr Hall wall	Wall D	Gypsum wallboard	Good	Yellow
				3rd Floor Laundry				
148	Lead Paint Fixed-Time	Negative	0.02	3rd flr Laundry	Ceiling	Gypsum wallboard	Good	White
149	VOID							
150	VOID							
151	Lead Paint Fixed-Time	Negative	0.02	3rd flr Laundry	Wall C	Gypsum wallboard	Good	White
152	VOID							
153	Lead Paint Fixed-Time	Negative	0	3rd flr Laundry	Door	Wood	Good	White
154	Lead Paint Fixed-Time	Negative	0	3rd flr Laundry	Door frame	Wood	Good	White
155	Lead Paint Fixed-Time	Negative	0	3rd flr Laundry	Windowsill	Wood	Good	Brown
				Unit 310				
156	Lead Paint Fixed-Time	Negative	0	Unit 310 - Kitchen/living	Ceiling	Gypsum wallboard	Good	White
157	Lead Paint Fixed-Time	Negative	0	Unit 310 - Kitchen/living	Wall A	Gypsum wallboard	Good	White

Reading	Mode	Pass/Fail Standard	Pb	Room	Component	Substrate	Condition	Color
158	Lead Paint Fixed-Time	Negative	0	Unit 310 - Kitchen/living	Wall B	Gypsum wallboard	Good	White
159	Lead Paint Fixed-Time	Negative	0	Unit 310 - Kitchen/living	Wall C	Gypsum wallboard	Good	White
160	Lead Paint Fixed-Time	Negative	0	Unit 310 - Kitchen/living	Wall D	Gypsum wallboard	Good	White
161	Lead Paint Fixed-Time	Negative	0	Unit 310 - Kitchen/living	Wall A (back of kitchen)	Gypsum wallboard	Good	White
162	Lead Paint Fixed-Time	Negative	0	Unit 310 - Kitchen/living	Wall B (back of kitchen)	Gypsum wallboard	Good	White
163	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
164	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
165	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
166	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
167	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
168	Lead Paint Fixed-Time	Negative	0.06	Bedroom	Windowsill	Wood	Good	Brown
169	Lead Paint Fixed-Time	Negative	0	Bedroom	Closet door	Wood	Good	White
170	Lead Paint Fixed-Time	Negative	0	Bedroom	Closet door	Wood	Good	White
171	Lead Paint Fixed-Time	Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
172	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
173	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
174	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
175	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
176	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	Brown
177	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	Brown
178	Lead Paint Fixed-Time	Negative	0	Balcony	Trim	Wood	Good	Brown
179	Lead Paint Fixed-Time	Negative	0	Balcony	Trim	Wood	Good	Brown
Unit 312								
180	Lead Paint Fixed-Time	Negative	0	Unit 312 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
181	Lead Paint Fixed-Time	Negative	0	Unit 312 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
182	Lead Paint Fixed-Time	Negative	0	Unit 312 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
183	Lead Paint Fixed-Time	Negative	0	Unit 312 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
184	Lead Paint Fixed-Time	Negative	0	Unit 312 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
185	Lead Paint Fixed-Time	Negative	0	Unit 312 - Kitchen/living room	Wall A (back of kitchen)	Gypsum wallboard	Good	White
186	Lead Paint Fixed-Time	Negative	0	Unit 312 - Kitchen/living room	Wall B (side of kitchen)	Gypsum wallboard	Good	White
187	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
188	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
189	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
190	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
191	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
192	Lead Paint Fixed-Time	Negative	0	Bedroom	Windowsill	Wood	Good	Brown
193	Lead Paint Fixed-Time	Negative	0	Bedroom	Door	Wood	Good	White
194	Lead Paint Fixed-Time	Negative	0	Bedroom	Door frame	Metal	Good	White
195	Lead Paint Fixed-Time	Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
196	VOID							
197	Lead Paint Fixed-Time	Negative	0.06	Bathroom	Wall B	Gypsum wallboard	Good	White
198	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White

Reading	Mode	Pass/Fail Standard	Pb	Room	Component	Substrate	Condition	Color
199	Lead Paint Fixed-Time	Negative	0.05	Bathroom	Wall D	Gypsum wallboard	Good	White

Reading	Mode	Pass/Fail Standard	Pb	Room	Component	Substrate	Condition	Color
1	Calibration	Negative	0.97			Test		
2	Calibration	Positive	1.01			Test		
3	Calibration	Positive	1.02			Test		
4	Calibration	Positive	1.02			Test		
5	Calibration	Negative	0.02			Test		
2nd Floor Laundry								
6	Lead Paint Fixed-Time	Negative	0	2nd flr laundry	Ceiling	Gypsum wallboard	Good	White
7	Lead Paint Fixed-Time	Negative	0	2nd flr laundry	Wall A	Gypsum wallboard	Good	White
8	Lead Paint Fixed-Time	Negative	0	2nd flr laundry	Wall B	Gypsum wallboard	Good	White
9	Lead Paint Fixed-Time	Negative	0	2nd flr laundry	Wall C	Gypsum wallboard	Good	White
10	Lead Paint Fixed-Time	Negative	0	2nd flr laundry	Wall D	Gypsum wallboard	Good	White
11	Lead Paint Fixed-Time	Negative	0	2nd flr laundry	Windowsill	Wood	Good	Brown
12	Lead Paint Fixed-Time	Negative	0	2nd flr laundry	Door	Wood	Good	White
Unit 314								
13	Lead Paint Fixed-Time	Negative	0	Unit 314 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
14	Lead Paint Fixed-Time	Negative	0	Unit 314 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
15	Lead Paint Fixed-Time	Negative	0	Unit 314 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
16	Lead Paint Fixed-Time	Negative	0	Unit 314 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
17	Lead Paint Fixed-Time	Negative	0	Unit 314 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
18	Lead Paint Fixed-Time	Negative	0	Unit 314 - Kitchen/living room	Wall A (back of kitchen)	Gypsum wallboard	Good	White
19	Lead Paint Fixed-Time	Negative	0	Unit 314 - Kitchen/living room	Wall B (back of kitchen)	Gypsum wallboard	Good	White
20	Lead Paint Fixed-Time	Negative	0	Unit 314 - Kitchen/living room	Wall D (back of kitchen)	Gypsum wallboard	Good	White
21	Lead Paint Fixed-Time	Negative	0	Balcony	Trim	Wood	Good	Brown
22	Lead Paint Fixed-Time	Negative	0	Balcony	Rail	Metal	Good	Black
23	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
24	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
25	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
26	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
27	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
28	Lead Paint Fixed-Time	Negative	0	Bedroom	Windowsill	Wood	Good	Brown
29	Lead Paint Fixed-Time	Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
30	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
31	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
32	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
33	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
34	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	White
35	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	White
Unit 313								
36	Lead Paint Fixed-Time	Negative	0	Unit 313 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
37	Lead Paint Fixed-Time	Negative	0	Unit 313 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
38	Lead Paint Fixed-Time	Negative	0	Unit 313 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
39	Lead Paint Fixed-Time	Negative	0	Unit 313 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White

Reading	Mode	Pass/Fail Standard	Pb	Room	Component	Substrate	Condition	Color
40	Lead Paint Fixed-Time	Negative	0	Unit 313 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
41	Lead Paint Fixed-Time	Negative	0	Unit 313 - Kitchen/living room	Wall C (back of kitchen)	Gypsum wallboard	Good	White
42	Lead Paint Fixed-Time	Negative	0	Unit 313 - Kitchen/living room	Wall D (back of kitchen)	Gypsum wallboard	Good	White
43	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
44	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
45	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
46	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
47	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
48	Lead Paint Fixed-Time	Negative	0	Bedroom	Windowsill	Wood	Good	Brown
49	Lead Paint Fixed-Time	Negative	0	Bedroom	Closet door	Wood	Good	White
50	Lead Paint Fixed-Time	Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
51	Lead Paint Fixed-Time	Negative	0.02	Bathroom	Wall A	Gypsum wallboard	Good	White
52	Lead Paint Fixed-Time	Negative	0.01	Bathroom	Wall B	Gypsum wallboard	Good	White
53	VOID							
54	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
55	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	White
56	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	White
57	Lead Paint Fixed-Time	Negative	0	Balcony	Column	Wood	Good	Brown
58	Lead Paint Fixed-Time	Negative	0	Balcony	Trim	Wood	Good	Brown
				Unit 110				
59	Lead Paint Fixed-Time	Negative	0.11	Unit 110 - Kitchen/living	Ceiling	Gypsum wallboard	Good	White
60	Lead Paint Fixed-Time	Negative	0.06	Unit 110 - Kitchen/living	Wall A	Gypsum wallboard	Good	White
61	Lead Paint Fixed-Time	Negative	0	Unit 110 - Kitchen/living	Wall B	Gypsum wallboard	Good	White
62	Lead Paint Fixed-Time	Negative	0	Unit 110 - Kitchen/living	Wall C	Gypsum wallboard	Good	White
63	Lead Paint Fixed-Time	Negative	0	Unit 110 - Kitchen/living	Wall D	Gypsum wallboard	Good	White
64	Lead Paint Fixed-Time	Negative	0	Unit 110 - Kitchen/living	Wall A (back of kitchen)	Gypsum wallboard	Good	White
65	Lead Paint Fixed-Time	Negative	0	Unit 110 - Kitchen/living	Wall B (side of kitchen)	Gypsum wallboard	Good	White
66	Lead Paint Fixed-Time	Negative	0	Patio	Soffit	Wood	Good	Brown
67	Lead Paint Fixed-Time	Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
68	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
69	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
70	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
71	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
72	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	White
73	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	White
				Unit 112				
74	Lead Paint Fixed-Time	Negative	0	Unit 112 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
75	Lead Paint Fixed-Time	Negative	0	Unit 112 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
76	Lead Paint Fixed-Time	Negative	0	Unit 112 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
77	Lead Paint Fixed-Time	Negative	0	Unit 112 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
78	Lead Paint Fixed-Time	Negative	0	Unit 112 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
79	Lead Paint Fixed-Time	Negative	0	Unit 112 - Kitchen/living room	Wall A (back of kitchen)	Gypsum wallboard	Good	White

Reading	Mode	Pass/Fail Standard	Pb	Room	Component	Substrate	Condition	Color
80	Lead Paint Fixed-Time	Negative	0	Unit 112 - Kitchen/living room	Wall B (side of kitchen)	Gypsum wallboard	Good	White
81	Lead Paint Fixed-Time	Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
82	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
83	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
84	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
85	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
86	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	White
87	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	White
88	Lead Paint Fixed-Time	Negative	0	Kitchen/living room	Closet door	Wood	Good	White
89	Lead Paint Fixed-Time	Negative	0	Patio	Soffit	Wood	Good	Brown
90	Lead Paint Fixed-Time	Negative	0	Patio	Pole	Wood	Good	Brown
Unit 113								
91	Lead Paint Fixed-Time	Negative	0	Unit 113 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
92	Lead Paint Fixed-Time	Negative	0.06	Unit 113 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
93	Lead Paint Fixed-Time	Negative	0	Unit 113 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
94	Lead Paint Fixed-Time	Negative	0	Unit 113 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
95	Lead Paint Fixed-Time	Negative	0	Unit 113 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
96	Lead Paint Fixed-Time	Negative	0	Patio	Soffit	Wood	Good	Brown
97	Lead Paint Fixed-Time	Negative	0	Patio	Rail	Metal	Good	Black
98	Lead Paint Fixed-Time	Negative	0.07	Bathroom	Ceiling	Gypsum wallboard	Good	White
99	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
100	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
101	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
102	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
103	Lead Paint Fixed-Time	Negative	0	Kitchen	Ceiling	Gypsum wallboard	Good	White
104	Lead Paint Fixed-Time	Negative	0	Kitchen	Wall A	Gypsum wallboard	Good	White
105	Lead Paint Fixed-Time	Negative	0	Kitchen	Wall B	Gypsum wallboard	Good	White
106	Lead Paint Fixed-Time	Negative	0	Kitchen	Wall C	Gypsum wallboard	Good	White
107	Lead Paint Fixed-Time	Negative	0	Kitchen	Wall D	Gypsum wallboard	Good	White
Unit Front Door/Frame								
108	Lead Paint Fixed-Time	Negative	0	Unit 204	Front door	Wood	Good	White
109	Lead Paint Fixed-Time	Negative	0	Unit 204	Frame	Metal	Good	White
110	Standardization	PASS		Unit 209	Front door	Wood	Good	White
111	Standardization	PASS		Unit 209	Frame	Metal	Good	White
112	Lead Paint Fixed-Time	Negative	0	Unit 210	Front door	Wood	Good	White
113	Lead Paint Fixed-Time	Negative	0.02	Unit 210	Frame	Metal	Good	White
114	Lead Paint Fixed-Time	Negative	0.01	Unit 211	Front door	Wood	Good	White
115	Lead Paint Fixed-Time	Negative	0	Unit 211	Frame	Metal	Good	White
116	Lead Paint Fixed-Time	Negative	0	Unit 213	Front door	Wood	Good	White
117	Lead Paint Fixed-Time	Negative	0	Unit 213	Frame	Metal	Good	White
118	Lead Paint Fixed-Time	Negative	0	Unit 215	Front door	Wood	Good	White
119	Lead Paint Fixed-Time	Negative	0	Unit 215	Frame	Metal	Good	White

Reading	Mode	Pass/Fail Standard	Pb	Room	Component	Substrate	Condition	Color
120	Lead Paint Fixed-Time	Negative	0	Unit 206	Front door	Wood	Good	White
121	Lead Paint Fixed-Time	Negative	0	Unit 206	Frame	Metal	Good	White
122	Lead Paint Fixed-Time	Negative	0	Unit 306	Front door	Wood	Good	White
123	Lead Paint Fixed-Time	Negative	0	Unit 306	Frame	Metal	Good	White
124	Lead Paint Fixed-Time	Negative	0	Unit 307	Front door	Wood	Good	White
125	Lead Paint Fixed-Time	Negative	0	Unit 307	Frame	Metal	Good	White
126	Lead Paint Fixed-Time	Negative	0	Unit 304	Front door	Wood	Good	White
127	Lead Paint Fixed-Time	Negative	0	Unit 304	Frame	Metal	Good	White
128	Lead Paint Fixed-Time	Negative	0	Unit 302	Front door	Wood	Good	White
129	Lead Paint Fixed-Time	Negative	0	Unit 302	Frame	Metal	Good	White
130	Lead Paint Fixed-Time	Negative	0	Unit 310	Front door	Wood	Good	White
131	Lead Paint Fixed-Time	Negative	0	Unit 310	Frame	Metal	Good	White
132	Lead Paint Fixed-Time	Negative	0	Unit 312	Front door	Wood	Good	White
133	Lead Paint Fixed-Time	Negative	0	Unit 312	Frame	Metal	Good	White
134	Lead Paint Fixed-Time	Negative	0	Unit 314	Front door	Wood	Good	White
135	Lead Paint Fixed-Time	Negative	0.02	Unit 314	Frame	Metal	Good	White
136	Lead Paint Fixed-Time	Negative	0	Unit 313	Front door	Wood	Good	White
137	Lead Paint Fixed-Time	Negative	0	Unit 313	Frame	Metal	Good	White
138	Lead Paint Fixed-Time	Negative	0	Unit 110	Front door	Wood	Good	White
139	Lead Paint Fixed-Time	Negative	0	Unit 110	Frame	Metal	Good	White
140	Lead Paint Fixed-Time	Negative	0	Unit 112	Front door	Wood	Good	White
141	Lead Paint Fixed-Time	Negative	0	Unit 112	Frame	Metal	Good	White
142	Lead Paint Fixed-Time	Negative	0	Unit 113	Front door	Wood	Good	White
143	Lead Paint Fixed-Time	Negative	0	Unit 113	Frame	Metal	Good	White
2nd Floor N Stairwell								
144	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Rail	Metal	Good	Black
145	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Riser	Wood	Good	Brown
146	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Door	Wood	Good	White
147	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Door frame	Metal	Good	White
148	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Wall A	Gypsum wallboard	Good	White
149	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Wall B	Gypsum wallboard	Good	White
150	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Wall C	Gypsum wallboard	Good	White
151	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Wall D	Gypsum wallboard	Good	White
152	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Rail	Metal	Good	Black
153	Lead Paint Fixed-Time	Negative	0.01	2nd flr north stairwell	Riser	Wood	Good	Brown
154	Lead Paint Fixed-Time	Negative	0.02	2nd flr north stairwell	Door	Wood	Good	White
155	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Door frame	Metal	Good	White
156	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Wall A	Gypsum wallboard	Good	White
157	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Wall B	Gypsum wallboard	Good	White
158	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Wall C	Gypsum wallboard	Good	White
159	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Wall D	Gypsum wallboard	Good	White

Reading	Mode	Pass/Fail Standard	Pb	Room	Component	Substrate	Condition	Color
160	Lead Paint Fixed-Time	Negative	0	Exterior Exterior side A outside	Bench	Wood	Good	Brown

May 1, 2012

Janet Murphy
PBS Environmental (Seattle)
 2517 Eastlake Ave E, Suite 100
 Seattle, WA 98102



Laboratory | Management | Training

RE: Metals Analysis; NVL Batch # 1206516.00

Dear Ms. Murphy,

Enclosed please find the test results for samples submitted to our laboratory for analysis. Preparation of these samples was conducted following protocol outlined in EPA Method SW 846-3051 unless stated otherwise. Analysis of these samples was performed using analytical instruments in accordance with U.S. EPA, NIOSH, OSHA and other ASTM methods.

For matrix materials submitted as paint, dust wipe, soil or TCLP samples, analysis for the presence of total metals is conducted using published U.S. EPA Methods. Paint and soil results are usually expressed in mg/Kg which is equivalent to parts per million (ppm). Lead (Pb) in paint is usually expressed in mg/Kg (ppm), Percent (%) or mg/cm² by area. Dust wipe sample results are usually expressed in ug/wipe and ug/ft². TCLP samples are reported in mg/L (ppm). For air filter samples, analyses are conducted using NIOSH and OSHA Methods. Results are expressed in ug/filter and ug/m³. Other matrix materials are analyzed accordingly using published methods or specified by client. The reported test results pertain only to items tested. Lead test results are not blank corrected.

For recent regulation updates pertaining to current regulatory levels or permissible exposure levels, please call your local regulatory agencies for more details.

This report is considered highly confidential and will not be released without your approval. Samples are archived for two weeks following analysis. Samples that are not retrieved by the client are discarded after two weeks.

Thank you for using our laboratory services. If you need further assistance please feel free to call us at 206-547-0100 or 1-888-NVLLABS.

Sincerely,

Nick Ly, Technical Director

Enclosure:



NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
 Tel: 206.547.0100, Fax: 206.634.1936
 www.nvllabs.com

Analysis Report

AIHA - IH # 101861
 WA - DOE # C1765

**Total Lead (Pb)**

Client: PBS Environmental (Seattle)

Address: 2517 Eastlake Ave E, Suite 100
 Seattle, WA 98102

Attention: Ms. Janet Murphy

Project Location: KCHA - Eastridge House 120 W. Sunset Way Issaquah WA

Batch #: 1206516.00

Matrix: Paint Chips

Method: EPA 7000B

Client Project #: 40573.071

Date Received: 05/01/2012

Samples Received: 10

Samples Analyzed: 10

Lab ID	Client Sample #	Sample Area (cm ²)	RL in mg/cm ²	Results mg/cm ²
12038505	40573.071-Pb-1	1.00	0.01000	0.03000
12038506	40573.071-Pb-2	1.00	0.01000	< 0.00900
12038507	40573.071-Pb-3	1.00	0.01000	0.02000
12038508	40573.071-Pb-4	1.00	0.01000	< 0.00900
12038509	40573.071-Pb-5	1.00	0.01000	< 0.00900
12038510	40573.071-Pb-6	1.00	0.01000	< 0.00900
12038511	40573.071-Pb-7	1.00	0.01000	0.05000
12038512	40573.071-Pb-8	1.00	0.01000	0.07000
12038513	40573.071-Pb-9	1.00	0.01000	0.04000
12038514	40573.071-Pb-10	1.00	0.01000	0.02000

Sampled by: Client

Analyzed by: Aaron Brown

Reviewed by: Nick Ly

Date Analyzed: 05/01/2012

Date Issued: 05/01/2012

A handwritten signature in black ink, appearing to read "Nick Ly".

Nick Ly, Technical Director

mg = Milligrams

cm² = Square centimeter

RL = Reporting Limit

'<' = Below the reporting Limit

Note : Method QC results are acceptable unless stated otherwise.

Unless otherwise indicated, the condition of all samples was acceptable at time of receipt.



Project: Eastridge House
KCHA 1206. Sunset Way Issaquah

Project #: 40573.071

Analysis requested: AAS Lead Paintchips

Date: 5/1/12

Relinqu'd by/Signature: Janet Murphy

Date/Time: 5/1/12

Received by/Signature: M. Laik

Date/Time: 5.1.12 800DB

Fax results to:

- Brian Stanford
- Ernest Edwards
- Gregg Middaugh
- Mark Hiley
- Prudy Stoudt-McRae
- Joe Lucas
- Janet Murphy
- Willem Mager
- Ferman Fletcher
- Tim Ogden
- Mike Smith
- Chuck Greeb

TURN AROUND TIME:

- 1 Hour
- 2 Hours
- 4 Hours
- 24 Hours
- 48 Hours
- 3-5 Days
- Other _____

Analyzed by Aaron Brown [Signature] NU 5/1/12 16:05
Graded by Aaron Brown [Signature] NU 5/2/12 12:10

BULK SAMPLE DATA FORM

Lab #	Sample #	Material	Location	Lab
	Pb-1	Black/Red/Metal/Rail	A Exterior	
	Pb-2	white/GWB/wall	1st Fl Mean RP wall	
	Pb-3	white/GWB/wall	3rd Fl Laundry Rm wall	
	Pb-4	white/GWB/wall	105 Kitch/Liv wall A	
	Pb-5	white/GWB/wall	105 Bedroom wall A	
	Pb-6	white/GWB/wall	107 Kitch/Liv wall D	
	Pb-7	white/GWB/wall	307 Bathroom wall A	
	Pb-8	white/GWB/wall	307 Bathroom ceiling	
	Pb-9	white/GWB/wall	312 Bathroom wall A	
	Pb-10	white/GWB/wall	313 Bathroom wall B	
		Paint chip sample		
		area 1cm x 1cm		

May 1, 2012

Janet Murphy
PBS Environmental (Seattle)
 2517 Eastlake Ave E, Suite 100
 Seattle, WA 98102



Laboratory | Management | Training

RE: Metals Analysis; NVL Batch # 1206514.00

Dear Ms. Murphy,

Enclosed please find the test results for samples submitted to our laboratory for analysis. Preparation of these samples was conducted following protocol outlined in EPA Method SW 846-3051 unless stated otherwise. Analysis of these samples was performed using analytical instruments in accordance with U.S. EPA, NIOSH, OSHA and other ASTM methods.

For matrix materials submitted as paint, dust wipe, soil or TCLP samples, analysis for the presence of total metals is conducted using published U.S. EPA Methods. Paint and soil results are usually expressed in mg/Kg which is equivalent to parts per million (ppm). Lead (Pb) in paint is usually expressed in mg/Kg (ppm), Percent (%) or mg/cm² by area. Dust wipe sample results are usually expressed in ug/wipe and ug/ft². TCLP samples are reported in mg/L (ppm). For air filter samples, analyses are conducted using NIOSH and OSHA Methods. Results are expressed in ug/filter and ug/m³. Other matrix materials are analyzed accordingly using published methods or specified by client. The reported test results pertain only to items tested. Lead test results are not blank corrected.

For recent regulation updates pertaining to current regulatory levels or permissible exposure levels, please call your local regulatory agencies for more details.

This report is considered highly confidential and will not be released without your approval. Samples are archived for two weeks following analysis. Samples that are not retrieved by the client are discarded after two weeks.

Thank you for using our laboratory services. If you need further assistance please feel free to call us at 206-547-0100 or 1-888-NVLLABS.

Sincerely,

Nick Ly, Technical Director

Enclosure:



NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

THIRD PARTY REPORTS - D.1



Analysis Report

AIHA - IH # 101861
WA - DOE # C1765

Total Lead (Pb)

Client: PBS Environmental (Seattle)
Address: 2517 Eastlake Ave E, Suite 100
Seattle, WA 98102

Batch #: 1206514.00

Matrix: Dust/wipe (Area)

Method: EPA 7000B

Client Project #: 40573.071

Date Received: 05/01/2012

Samples Received: 6

Samples Analyzed: 6

Attention: Ms. Janet Murphy

Project Location: KCHA - Eastridge House 120 W. Sunset Way Issaquah WA

Lab ID	Client Sample #	Element	Sample sq ft	RL ug/ sq ft	Results in ug/wipe	Results in ug/sq. ft
12038493	40573.071-W-1	Lead (Pb)	0.25	36.0	< 9.0	< 36.0
12038494	40573.071-W-2	Lead (Pb)	0.50	18.0	< 9.0	< 18.0
12038495	40573.071-W-3	Lead (Pb)	0.50	18.0	< 9.0	< 18.0
12038496	40573.071-W-4	Lead (Pb)	0.50	18.0	< 9.0	< 18.0
12038497	40573.071-W-5	Lead (Pb)	0.50	18.0	< 9.0	< 18.0
12038498	40573.071-W-6	Lead (Pb)	0.25	36.0	< 9.0	< 36.0

Sampled by: Client
Analyzed by: Aaron Brown
Reviewed by: Nick Ly

Date Analyzed: 05/01/2012
Date Issued: 05/01/2012

A handwritten signature in black ink, appearing to read "Nick Ly".

Nick Ly, Technical Director

ug/ sq. ft. =Micrograms per square foot
ug / wipe = Micrograms per wipe

RL = Reporting Limit
'<' = Below the reporting Limit

Note : Method QC results are acceptable unless stated otherwise. Concentration (ug/ft²) not reported if sample area is zero.
Unless otherwise indicated, the condition of all samples was acceptable at time of receipt.



Project: Eastridge House
KCIA 120 W. Sunset Way Issaquah
 Analysis requested: AAS Lead Dust
 Relinq'd by/Signature: Janet Murphy
 Received by/Signature: M. Koike

Project #: 40573.071
 Date: 5/1/12
 Date/Time: 5/1/12
 Date/Time: 5-1-12 800DB

Fax results to:

- | | | |
|---|---|--|
| <input type="checkbox"/> Brian Stanford | <input type="checkbox"/> Prudy Stoudt-McRae | <input type="checkbox"/> Ferman Fletcher |
| <input type="checkbox"/> Ernest Edwards | <input type="checkbox"/> Joe Lucas | <input type="checkbox"/> Tim Ogden |
| <input type="checkbox"/> Gregg Middaugh | <input type="checkbox"/> Janet Murphy | <input type="checkbox"/> Mike Smith |
| <input type="checkbox"/> Mark Hiley | <input type="checkbox"/> Willem Mager | <input type="checkbox"/> Chuck Greeb |

TURN AROUND TIME:

- | | | |
|----------------------------------|--|--------------------------------------|
| <input type="checkbox"/> 1 Hour | <input type="checkbox"/> 24 Hours | <input type="checkbox"/> 3-5 Days |
| <input type="checkbox"/> 2 Hours | <input checked="" type="checkbox"/> 48 Hours | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> 4 Hours | | |
- Analyzed by Aaron Brown [Signature] MM 5/1/12 16:50
 Emailed by Aaron Brown [Signature] MM 5/2/12 17:00

BULK SAMPLE DATA FORM

Lab #	Sample #	Material	Location	Lab
	<u>w-1</u>	<u>DUST</u>	<u>105 Bedroom Sil</u>	
	<u>w-2</u>	<u>DUST</u>	<u>107 Kitchen Floor</u>	
	<u>w-3</u>	<u>DUST</u>	<u>312 Bathroom Floor</u>	
	<u>w-4</u>	<u>DUST</u>	<u>206 Kitchen Floor</u>	
	<u>w-5</u>	<u>DUST</u>	<u>306 Kitchen Floor</u>	
	<u>w-6</u>	<u>DUST</u>	<u>306 Bedroom Sil</u>	
		<u>Floor Areas 9"x8"</u>		
		<u>Sills 18"x2"</u>		

S:\Masters\Office\Tech Forms & Templates\Lab Chain-of-Custody.doc

May 2, 2012

Janet Murphy
PBS Environmental (Seattle)
 2517 Eastlake Ave E, Suite 100
 Seattle, WA 98102



RE: Metals Analysis; NVL Batch # 1206513.00

Dear Ms. Murphy,

Enclosed please find the test results for samples submitted to our laboratory for analysis. Preparation of these samples was conducted following protocol outlined in EPA Method SW 846-3051 unless stated otherwise. Analysis of these samples was performed using analytical instruments in accordance with U.S. EPA, NIOSH, OSHA and other ASTM methods.

For matrix materials submitted as paint, dust wipe, soil or TCLP samples, analysis for the presence of total metals is conducted using published U.S. EPA Methods. Paint and soil results are usually expressed in mg/Kg which is equivalent to parts per million (ppm). Lead (Pb) in paint is usually expressed in mg/Kg (ppm), Percent (%) or mg/cm² by area. Dust wipe sample results are usually expressed in ug/wipe and ug/ft². TCLP samples are reported in mg/L (ppm). For air filter samples, analyses are conducted using NIOSH and OSHA Methods. Results are expressed in ug/filter and ug/m³. Other matrix materials are analyzed accordingly using published methods or specified by client. The reported test results pertain only to items tested. Lead test results are not blank corrected.

For recent regulation updates pertaining to current regulatory levels or permissible exposure levels, please call your local regulatory agencies for more details.

This report is considered highly confidential and will not be released without your approval. Samples are archived for two weeks following analysis. Samples that are not retrieved by the client are discarded after two weeks.

Thank you for using our laboratory services. If you need further assistance please feel free to call us at 206-547-0100 or 1-888-NVLLABS.

Sincerely,

Nick Ly, Technical Director

Enclosure:



NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

THIRD PARTY REPORTS - D.1



Analysis Report

AIHA - IH # 101861
WA - DOE # C1765

Total Lead (Pb)

Client: PBS Environmental (Seattle)
Address: 2517 Eastlake Ave E, Suite 100
Seattle, WA 98102

Batch #: 1206513.00

Matrix: Soil

Method: EPA 7000B

Client Project #: 40573.071

Date Received: 05/01/2012

Samples Received: 1

Samples Analyzed: 1

Attention: Ms. Janet Murphy

Project Location: KCHA - Eastridge House 120 W. Sunset Way Issaquah WA

Lab ID	Client Sample #	Sample Wt (g)	RL mg/ kg	Results in mg/Kg	Results in ppm
12038492	40573.071-S-1	0.2939	32.0	< 32.0	< 32.0

Sampled by: Client

Analyzed by: Aaron Brown

Reviewed by: Nick Ly

Date Analyzed: 05/02/2012

Date Issued: 05/02/2012


Nick Ly, Technical Director

mg/ kg = Milligrams per kilogram

ppm = Parts per million

RL = Reporting Limit

'<' = Below the reporting Limit

Note : Method QC results are acceptable unless stated otherwise.

Unless otherwise indicated, the condition of all samples was acceptable at time of receipt.



BATCH ID
1206513.00

Project: Eastridge House
KCHA - 120 W. Sunset Way Issaquah WA

Project #: 40573.071

Analysis requested: AAS Lead

Date: 5/1/12

Relinq'd by/Signature: Janet Murphy

Date/Time: 5/1/12

Received by/Signature: M. Koike

Date/Time: 5/1/12 800DB

Fax results to:

- Brian Stanford
- Ernest Edwards
- Gregg Middaugh
- Mark Hiley
- Prudy Stoudt-McRae
- Joe Lucas
- Janet Murphy
- Willem Mager
- Ferman Fletcher
- Tim Ogden
- Mike Smith
- Chuck Greeb

TURN AROUND TIME:

- 1 Hour
 - 2 Hours
 - 4 Hours
 - 24 Hours
 - 48 Hours
 - 3-5 Days
 - Other _____
- Analyzed by Aaron Brown NA 5/2/12 10:05
 Grinded by Aaron Brown NA 5/2/12 17:10

BULK SAMPLE DATA FORM

Lab #	Sample #	Material	Location	Lab
	<u>40573.071</u> <u>S-1</u>	<u>Soil</u>	<u>All 4 sides of Bldg</u> <u>Drip Line</u>	

TAB 2
Certifications

STATE OF WASHINGTON

Department of Commerce Lead-Based Paint Program

Janet J. Murphy

Has fulfilled the certification requirements of Washington Administrative code (WAC) 365-230 and has been certified to conduct lead-based paint activities pursuant to WAC 365-230-200 as a:

Risk Assessor

<u>Certification #</u>	<u>Issuance Date</u>	<u>Expiration Date</u>
0258	3/8/2010	3/8/2013

STATE OF WASHINGTON

Department of Commerce
Lead-Based Paint Program

PBS Engineering & Environmental

Has fulfilled the certification requirements of Washington Administrative code (WAC) 365-230 and has been certified to conduct lead-based paint activities pursuant to WAC 365-230-200:

<u>Certification #</u>	<u>Issuance Date</u>	<u>Expiration Date</u>
0178	7/14/2010	9/3/2013



STATE OF WASHINGTON

Department of Community, Trade and Economic Development
Lead-Based Paint Program

NVL Laboratories, Inc.

Has fulfilled the certification requirements of Washington Administrative code (WAC) 365-230 and has been certified to conduct lead-based paint activities pursuant to WAC 365-230-200:

Certification #	Issuance Date	Expiration Date
0291	2/19/2009	5/31/2012



February 28, 2013

Alton Leung
King County Housing Authority
600 Andover Park West
Tukwila, Washington 98188

RE: Limited Asbestos and Lead Containing Materials Survey Report – Piping Renovation Pathway
Areas Surveyed Include all Common Areas and Units 111, 113, 211, 213, 311 and 313

Eastridge House
120 West Sunset Way
Issaquah, Washington 98027
(Project # KCHA32114)

Dear Mr. Leung,

Attached is the RGA Environmental limited asbestos and lead containing materials survey report for the piping renovation pathway throughout the Eastridge House located at 120 West Sunset Way in Issaquah, Washington. The areas surveyed include all common areas and units 111, 113, 211, 213, 311 and 313.

We appreciate the opportunity to have been of service to you. If you have any questions regarding this report feel free to contact me at (206) 281-8858.

Sincerely,

A handwritten signature in black ink, appearing to read "A. Harkins", is written over a faint, larger version of the signature.

Angela Harkins
Project Manager
RGA Environmental, Inc.



Improving Lives, Reducing Risks



Limited Asbestos and Lead Containing Materials Survey Report – Piping Renovation Pathway

Eastridge House
120 West Sunset Way
Issaquah, Washington 98027

Project No. KCHA32114

Prepared for:

Alton Leung
King County Housing Authority
600 Andover Park West
Tukwila, Washington 98188

Prepared by:

RGA Environmental, Inc.
1730 Minor Avenue, Suite 900
Seattle, WA 98101
206-281-8858

February 28, 2013

Report prepared and reviewed by:

A handwritten signature in black ink, appearing to read "A. Harkins".

Project Manager

Angela Harkins

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5.0 SURVEY RESULTS	6
6.0 CONCLUSIONS AND RECOMENDATIONS.....	15
7.0 LIMITS OF SURVEY	15

Attachments:

- Laboratory Results
- Field Notes
- Sample Location Drawings
- RGA Certifications

1.0 EXECUTIVE SUMMARY

On February 15, 2013, Mr. John McCaslin and Mr. Russell Browne of RGA Environmental, Inc. (RGA) conducted a limited asbestos and lead containing materials survey for suspect asbestos-containing building materials and lead containing coatings throughout the plumbing renovation pathway, including all common areas and units 111, 113, 211, 213, 311 and 313 of the Eastridge House located at 120 West Sunset Way in Issaquah, Washington as outlined by the Client. This survey was conducted at the request of Mr. Alton Leung of the King County Housing Authority in preparation for the planned renovation at this location.

1.1 Asbestos

See Table 1 below for a summary of the asbestos containing materials found in the survey.

Table 1 - Summary of Asbestos-Containing Materials found Throughout the Plumbing Renovation Pathway, including all common areas and units 111, 113, 211, 213, 311 and 313 in the Eastridge House located at 120 West Sunset Way in Issaquah, Washington

Material Description (Homogeneous Material)	Location	Asbestos Content	Approximate Quantity*
Texturing on gypsum wallboard walls and ceilings	Throughout the building	2% Chrysotile	7,200 SF
Wallboard and joint compound	Throughout the building	Layers 2 and 4: Joint compound – 2% Chrysotile Wall unit as a whole - <1% Chrysotile	7,200 SF
Brown mastic associated with 4" tan, beige and olive green cove base	Throughout the building	<1% Tremolite	500 LF
Black sink undercoating	Throughout the building in both common areas and units	2% Chrysotile	Up to 40 EA
Gray sink undercoating	1 st floor community area	5% Chrysotile	1 EA
Beige/Tan speckled vinyl sheet flooring and mastic	1 st floor common restrooms, common kitchen and 3 rd floor laundry rooms	Layer 2: Black mastic – 3% Chrysotile	530 SF
Beige/Gray tile pattern vinyl sheet flooring/mastic over green mosaic pattern vinyl sheet flooring and mastic	Throughout 1 st , 2 nd and 3 rd floor units bedroom closets, bathrooms and kitchens	30% Chrysotile	4,500 SF
12"X12" Beige/Tan streaks vinyl floor tile and mastic	1 st floor chair storage, 2 nd floor janitor's closet and 3 rd floor janitor's closet	Vinyl tile – 2% Chrysotile Black mastic – 2% Chrysotile	250 SF
Mudded pipe fittings	Throughout building	3% Amosite	160 EA

*SF – Square Feet, LF – Linear Feet, EA - Each

Table 2 - Summary of Assumed Asbestos-Containing Materials found Throughout the Plumbing Renovation Pathway, including all common areas and units 111, 113, 211, 213, 311 and 313 in the Eastridge House located at 120 West Sunset Way in Issaquah, Washington

Material Description (Homogeneous Material)	Location	Asbestos Content	Approximate Quantity*
Piping gaskets	Piping	Assumed	Unknown
Hidden piping insulation not sampled	Throughout	Assumed	Unknown
4" Beige ceramic wall tile, grout and mortar or mastic	Common men's restroom	Assumed	130 SF
Mastic behind white fiberglass reinforced poly on walls	Garbage room	Assumed	140 SF
Ceramic wall tile, grout and mastic or mortar	Unit 111 bathroom – assumed in all bathrooms	Assumed	30 SF each unit
Mastic behind shower surround	Unit 113 bathroom – assumed in all bathrooms	Assumed	30 SF each unit

*SF – Square Feet

The full scope of sampling is presented in Section 5.

1.2 Lead

Based on XRF paint testing, 3 homogeneous painted components tested were found to have detectable quantities of lead; 2 of them were classifiable as lead-based paint¹. A complete table of paint coatings tested can be found in section 5.2 below.

2.0 INTRODUCTION

On February 15, 2013, Mr. John McCaslin and Mr. Russell Browne of RGA Environmental, Inc. (RGA) conducted a limited asbestos and lead containing materials survey for suspect asbestos-containing building materials and lead containing coatings throughout the plumbing renovation pathway including all common areas and units 111, 113, 211, 213, 311 and 313 of the Eastridge House located at 120 West Sunset Way in Issaquah, Washington as outlined by the Client. Both Mr. McCaslin and Mr. Browne are Asbestos Hazard Emergency Response Act (AHERA) certified building inspectors (Certificate # 12-0923, Expiration Date 05/10/2013 and Certificate #12-1560, Expiration Date 08/10/13). Mr. McCaslin is a Washington State Department of Commerce certified lead risk assessor/inspector (Certificate # 6039, Expiration Date 06/09/15). A copy of their certificates can be found in the enclosed attachments.

This survey was conducted to document the presence of and locations of both asbestos containing materials and lead containing paints or coatings within the plumbing renovation pathway including all common areas and units 111, 113, 211, 213, 311 and 313 of the Eastridge House located at 120 West Sunset Way in Issaquah, Washington. All applicable and accessible building areas were visited and samples were collected of building materials suspected to contain asbestos (wallboard, flooring materials, and other miscellaneous materials). Paint coatings were non-destructively tested for lead content using an XRF analyzer. See Table 3 for a list of materials sampled for asbestos and table 4 for a list of paint coatings tested.

Efforts were made during the inspection to find all asbestos containing materials in the plumbing renovation pathway, including all common areas and units 111, 113, 211, 213, 311 and 313 of the

¹ As defined by EPA/HUD, See Section 3.2 below

Eastridge House. Limited penetrations were made through walls, floors, and ceilings to identify concealed materials. If additional suspect materials are identified in wall cavities or under the building that were not included in this survey, the renovation work should halt and an accredited AHERA inspector should sample untested suspect materials for the presence of asbestos. Any materials not sampled and properly identified must be sampled by an AHERA inspector prior to disturbance.

The Eastridge House located at 120 West Sunset Way in Issaquah, Washington is a 3-story multi-family residential structure with 40 units and approximately 6,000 square feet of interior space that consists of a stick-built structure with wood siding. Interior finishes include the following: walls are gypsum wallboard and ceilings are a mixture of gypsum wallboard and suspended ceiling tiles; flooring materials include carpet, vinyl sheeting and vinyl tiles.

All contractors working on the building site must review this inspection report prior to participating in the renovation, per WAC 296-62-07721 "Communication of Hazards to Employees."

3.0 REGULATORY COMPLIANCE

3.1 Asbestos

The intent of the asbestos survey is to comply with governing asbestos regulations required by the State of Washington and Puget Sound Clean Air Agency (PSCAA). The State of Washington requires a written "good faith inspection" for identification of asbestos-containing materials prior to any remodeling, maintenance, or demolition work. During demolition and construction work, it is the responsibility of the owner and the contractors to make this survey document available to all concerned parties who may be handling the building materials.

Additionally, PSCAA requires that a copy of the written asbestos survey be made available on-site for inspection by a PSCAA Control Officer during construction and demolition work. The survey is required to be performed in accordance with 40 CFR 763.86. These federal standards require inspections to be conducted by an EPA/AHERA accredited building inspector with analysis to be provided by an asbestos laboratory accredited by the National Bureau of Standards. The requirements are described in Article 1 and Article 4 of PSCAA's Asbestos Control Standards. All survey work was conducted in compliance with the above mentioned standards.

3.2 Lead

The Washington State Department of Labor and Industries defines a lead-based paint to be a coating with any detectable lead. The United States Environmental Protection Agency (EPA) and US Department of Housing and Urban Development (HUD) have defined a lead-based paint as any coating containing greater than 0.5% lead or 1.0 mg/cm² of lead.

In Washington, workers disturbing lead-containing coatings are covered under the lead standard (WAC 296-155-176) until shown they are not being exposed above the action limit of 30 µg/m³ and the permissible exposure limit of 50 µg/m³. The requirements of this standard include, but are not limited to, air monitoring, respiratory protection, medical surveillance, lead work plan, warning signs, and wash stations.

When lead is discovered in a paint coating, worker protection and environmental protection requirements apply to all construction activities that may disturb these coatings. The issues surrounding the demolition of materials that have lead-containing coatings include worker exposure, public health, and waste characterization.

3.2.1 Worker Exposure to Lead

WAC 296-155-176, Lead, applies to all construction work where an employee may be occupationally exposed to lead. Construction work includes activities such as demolition or salvage, removal or encapsulation, and renovation of materials that contain lead. When a worker may be exposed to lead, the employer must take the following actions according to WAC 296-155-176:

1. Perform an exposure assessment for each operation where the employee may be exposed to lead at or above 30 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). The exposure assessment consists of personal air monitoring to determine representative lead exposure levels for the work being performed.
2. During the exposure assessment for demolition operations, the employer must provide and require to be worn half-mask air-purifying respirators equipped with high efficiency particulate air (HEPA) filters and disposable clothing.
3. A designated change area which allows for separate storage areas for work and street clothing to prevent cross contamination.
4. Hand washing facilities to allow employees to wash their hands and faces.
5. Biological monitoring in the form of blood sampling and analysis for lead and zinc protoporphyrin levels.
6. Training to include hazard communication, safety, and the limitations, proper use, and maintenance of respirators.

In addition to the protective equipment and hygiene requirements, the employer must attempt to reduce the levels of airborne lead through the use of engineering controls such as ventilation and wet methods.

3.2.2 Public Health

The owner should ensure that the general public will not have access to the site during renovation activities. In addition, controlling visible emissions (dust) will decrease the airborne concentration of lead, thus decreasing the airborne exposure levels of the general public and potential contamination of surrounding areas from dust migration.

Lead-Based Paint Renovation

The requirements of WAC 365-230-270, Lead-Based Paint Renovation, apply to "Target Housing or child-occupied facilities" that have paint or other surface coatings that contain lead equal to or in excess of 1.0 mg/cm² or 0.5% by weight as determined by an inspector or risk assessor or by a certified renovator using an EPA approved test kit. Requirements of WAC 365-230-270 for performing work in target housing include the following:

1. Distribution of information on lead paint hazards to housing occupants
2. Certification of the (Contractor) as a Lead Renovator
3. Certification of the firm as a lead renovation firm
4. Documented training of project workers, and working supervisor, in Lead Safe Work Practices
5. Utilize Lead Safe Work Practices in execution of the project
6. Documentation of cleaning verification or clearance testing, as required, at the completion of the project

7. Recordkeeping packet to be kept for 3 years by contractor, with a copy supplied to client at close of project.

4.0 SAMPLING PLAN AND LABORATORY ANALYSIS

4.1 Asbestos

4.1.1 Objectives

The objective of the survey was to determine the quantity and location of building materials (wallboard, flooring materials, etc.) that contain asbestos.

4.1.2 Asbestos Sampling Protocol

This survey was conducted using a protocol adapted from the Asbestos Hazard Emergency Response Act (AHERA). The protocol is as follows:

1. Group materials into homogeneous sampling areas based on visual observations and information provided about building renovations.
2. Quantify each homogeneous sampling area and collect samples from each area using the "3-5-7" criteria for surfacing material to determine the number of samples needed. Quantify and collect a minimum of three samples of each thermal system insulation. The number of samples collected of miscellaneous materials was determined by the inspector.
3. Samples were collected from areas of easy access and minimum disturbance to building occupants.
4. Samples of each material were taken to the substrate, ensuring that all components of the material were included.
5. Sampling was performed by an AHERA accredited building inspector.

4.1.3 Asbestos Sampling Procedure

1. Label sample container with unique identification number. Record sample number, sample location, type of material, and approximate material quantity on data form.
2. Extract sample using a clean knife or other tool to collect approximately one tablespoon of the material. Penetrate all layers of material.
3. Place sample in a container and tightly seal it.
4. Clean tools with wet wipes. Clean any material debris from sampling area.

4.1.3 Asbestos Laboratory Analysis

The bulk samples were analyzed by RGA Laboratory using polarized light microscopy (PLM) with dispersion staining in accordance with US EPA method 600/R-93/116 as specified in 40 CFR Chapter I (7-1-93 edition) Part 763, Subpart F, Appendix A, pages 499-504. Polarizing light microscopy quantifies asbestos concentrations at between 100% and 1% detection levels. Levels below 1% can only be stated as "trace" or "less than 1% (< 1%)". RGA Laboratory is a member of the National Voluntary Laboratory

Accreditation Program (NVLAP), NVLAP Code #200613-0. Samples were not analyzed by point count to determine asbestos concentrations.

For samples containing more than one separable layer of materials, the laboratory report will include findings for each layer (labeled L-1 for layer one and L-2 for layer two, etc.) and a total percentage for the entire sample, if applicable. The asbestos concentration in the sample is determined by visual estimation.

4.2 XRF (Lead Painted Coatings) Testing

4.2.1 Objectives

The objective of the testing was to determine locations of coatings that are lead containing and the percentage of lead in these coatings.

4.2.2 XRF Testing Procedure

Each painted component type was tested for the presence of LBP and one bulk paint chip sample was collected for quality control purposes. All building components to be impacted during renovations were tested. The results were recorded on data sheets (see attached documents).

After completing the testing of the building, components were identified as LBP or non-LBP based on presence of detectable lead. Painted components, which resulted in positive results, were classified as positive. Painted components testing as negative were classified as negative. No destructive QC samples (paint samples) were taken, as typically done when inconclusive results are found, as there were no inconclusive results.

4.2.3 X-Ray Fluorescence (XRF)

An XRF Lead Analyzer is a portable, in-situ measuring instrument that uses x-ray fluorescence to test for lead in paint. The XRF sends energy in the form of a gamma ray photon into the paint or coating on a wall. Some of the gamma rays strike the inner shells of atoms, resulting in the electron being dislodged from their orbit. The atom then becomes unstable. To regain stability, the atom fills the gap left by the lost electron with an electron from one of its outer shells. This causes the release of an x-ray photon (fluorescence). This photon has an energy level “characteristic” of the type of element (like lead) that it came from. The XRF then measures the energy level and quantity of returning x-ray photons to determine the quantity of lead (or other element of interest) present at the sample point.

The instrument used for this inspection was an Innov-X Inspector XRF Lead Analyzer, serial # M11820. Samples were collected in “Lead Paint Analysis” mode requiring no substrate correction sampling (paint chip sampling).

Calibration checks of the instrument were performed using NIST Standard Reference Material (SRM) 2573 (1.040 mg/cm² ± 0.064) and 2570 (0.0 mg/cm²) before each sampling activity, every 4 hours during sampling, and after each sampling activity. Calibration checks were satisfactory, indicating the instrument was functioning properly and in calibration.

5.0 SURVEY RESULTS

5.1 Asbestos

Table 3 (below) contains an inventory of the building materials sampled for asbestos throughout the plumbing renovation pathway, including all common areas and units 111, 113, 211, 213, 311 and 313 in the Eastridge House located at 120 West Sunset Way in Issaquah, Washington. The location column

identifies all locations in the building where the homogenous materials were identified. Actual sample locations are identified in the attached site maps.

Table 3 - Building Materials Sampled for Asbestos by RGA throughout the Plumbing Renovation Pathway, including all common areas and units 111, 113, 211, 213, 311 and 313 in the Eastridge House located at 120 West Sunset Way in Issaquah, Washington.

Sample ID	Material Description	Location	Asbestos Content	Friability
EH-01A, 01B, 01C	Texturing on gypsum wallboard walls and ceilings	Throughout building hallways and common areas	2% Chrysotile	Friable
EH-02A, 02B, 02C	Gypsum wallboard walls and ceilings with joint compound	Throughout building hallways and common areas	Layer 2 and 4: Joint compound – 2% Chrysotile Wall unit as a whole – <1% Chrysotile	Friable
EH-03A	Light green wallpaper and adhesive on gypsum wallboard	1 st floor hallway	No Asbestos Detected	Friable
EH-04A, 04C	Beige mastic associated with 4" tan cove base	Throughout building	No Asbestos Detected	Non-Friable
EH-05A, 05B	Mastic under blue/tan carpet	Throughout building	No Asbestos Detected	Non-Friable
EH-06A, 06B	2'X4' Fissure suspended ceiling tiles	Throughout hallways in building	No Asbestos Detected	Friable
EH-07A, 07B	Brown mastic associated with 4" tan cove base	1 st floor men's and women's restroom, common kitchen and throughout 2 nd floor common areas	Layer 1: Brown adhesive – <1% Tremolite	Non-Friable
EH-08B, 08C	Beige/tan speckled vinyl sheet flooring and mastic	1 st floor men's and women's restroom, common kitchen, 2 nd and 3 rd floor laundry rooms	Layer 2: Black mastic – 3% Chrysotile	Non-Friable
EH-09A	White caulking	1 st floor men's restroom	No Asbestos Detected	Non-Friable
EH-10A, 10C	Fiberglass piping insulation with cloth wrap and bridging	Throughout building	No Asbestos Detected	Friable
EH-11A, 11B	Mudded piping elbows	Throughout building	3% Amosite	Friable
EH-12A	Black fiberglass batting insulation	Throughout building – interior walls	No Asbestos Detected	Friable
EH-13A	Black gaskets at sink drain	1 st floor men's restroom	No Asbestos Detected	Non-Friable
EH-14A	Black sink undercoating with gasket and putty	1 st floor Common Kitchen	2% Chrysotile	Non-Friable
EH-15A	Gray sink undercoating with gasket and putty	1 st floor Community Area	5% Chrysotile	Non-Friable
EH-16A, 16B	12"X12" Beige/tan streaks vinyl floor tile and mastic	1 st floor chair storage, 2 nd floor janitor's closet and 3 rd floor janitor's closet	Tile – 2% Chrysotile Black mastic – 2% Chrysotile	Non-Friable

Sample ID	Material Description	Location	Asbestos Content	Friability
EH-17A	Gypsum wallboard and joint compound	Throughout 1 st floor	Layer 2 and 4: Joint compound – 2% Chrysotile Wall unit as a whole – <1% Chrysotile Layer 7: Brown adhesive – <1% Tremolite	Friable Non-Friable
EH-17C	Gypsum wallboard and joint compound	Throughout 1 st floor	Layer 2 and 4: Joint compound – 2% Chrysotile Wall unit as a whole – <1% Chrysotile	Friable
EH-18A	Mastic associated with 4” brown cove base	1 st floor garbage room	No Asbestos Detected	Non-Friable
EH-19A, 19B	Texturing on gypsum wallboard walls and ceilings	Throughout 1 st floor	2% Chrysotile	Friable
EH-20A	Gasket at sink drain	1 st and 2 nd floor janitor’s closet	No Asbestos Detected	Non-Friable
EH-21A, 21B	Mastic associated with 4” tan cove base	1 st floor – Units 111 and 113 (assumed in all units on floor)	Layer 2: Brown adhesive – <1% Tremolite Layer 3: Joint compound – 2% Chrysotile	Non-Friable Friable
EH-22A, 22B	Beige/gray tile pattern vinyl sheet flooring and mastic	1 st floor – Units 111 and 113 bathroom and kitchen (assumed in all units on floor)	No Asbestos Detected	Friable
EH-23A, 23B	Gypsum wallboard and joint compound	1 st floor – Units 111 and 113 (assumed in all units on floor)	Layer 2 and 4: Joint compound – 2% Chrysotile Wall unit as a whole – <1% Chrysotile	Friable
EH-24A, 24B	Texturing on gypsum wallboard walls and ceilings	1 st floor – Unit 111 bedroom closet and 113 bathroom (assumed in all units on floor)	2% Chrysotile	Friable
EH-25A, 25B	Gray sink undercoating with gasket and putty	1 st floor – Units 111 and 113 kitchen (assumed in all units on floor)	No Asbestos Detected	Non-Friable
EH-26A	Pink wallpaper and adhesive on gypsum wallboard	2 nd floor hallway	No Asbestos Detected	Friable
EH-27A, 27B	Gypsum wallboard and joint compound	2 nd and 3 rd floor laundry rooms	Layer 2 and 4: Joint compound – 2% Chrysotile Wall unit as a whole – <1% Chrysotile	Friable

Sample ID	Material Description	Location	Asbestos Content	Friability
EH-28A, 28B	Texturing on gypsum wallboard walls and ceilings	2 nd and 3 rd floor laundry rooms	Layers 2 and 4 – 2% Chrysotile	Friable
EH-29A	Mastic associated with 4" beige cove base	2 nd floor – Unit 211 bathroom (assumed in all units on floor)	Layer 1: Brown adhesive – <1% Tremolite Layer 3: Joint compound – 2% Chrysotile	Non-Friable Friable
EH-30A	Beige/gray tile pattern vinyl sheet flooring and mastic over pebble pattern vinyl sheet flooring and mastic	2 nd floor – Unit 211 bathroom (assumed in all units on floor)	30% Chrysotile	Friable
EH-31A, 31B	Gypsum wallboard and joint compound	2 nd floor – Units 211 and 213 bedroom closet (assumed in all units on floor)	Layer 2 and 4: Joint compound – 2% Chrysotile Wall unit as a whole – <1% Chrysotile	Friable
EH-32A, 32B	Texturing on gypsum wallboard walls and ceilings	2 nd floor – Units 211 and 213 bedroom closet (assumed in all units on floor)	2% Chrysotile	Friable
EH-33A	Gray sink undercoating with gasket and putty	2 nd floor – Unit 211 kitchen (assumed in all units on floor)	No Asbestos Detected	Non-Friable
EH-34A, 34B	Mastic associated with 4" olive green cove base	2 nd and 3 rd floors – Units 213 and 311 bathroom (assumed in all units on floors)	Layer 1: Brown adhesive – <1% Tremolite	Non-Friable
EH-35A, 35B	Green mosaic pattern vinyl sheet flooring and mastic	2 nd and 3 rd floors – Units 213 and 311 bathroom (assumed in all units on floors)	30% Chrysotile	Friable
EH-36A	Black sink undercoating with gasket and putty	2 nd floor – Unit 213 kitchen (assumed in all units on floor)	2% Chrysotile	Non-Friable
EH-37A, 37B	Gypsum wallboard and joint compound	3 rd floor – Units 311 and 313 bedroom closet (assumed in all units on floors)	Layer 2 and 4: Joint compound – 2% Chrysotile Wall unit as a whole – <1% Chrysotile	Friable
EH-38A, 38B	Texturing on gypsum wallboard walls and ceilings	3 rd floor – Units 311 and 313 bedroom closet (assumed in all units on floors)	2% Chrysotile	Friable
EH-39A	Mastic associated with 4" tan cove base	3 rd floor – Unit 313 bathroom (assumed in all units on floors)	Layer 2: Brown adhesive – <1% Tremolite	Non-Friable

Sample ID	Material Description	Location	Asbestos Content	Friability
EH-40A	Beige/gray vinyl sheet flooring and mastic over pebble pattern vinyl sheet flooring and mastic	3 rd floor – Unit 313 bathroom (assumed in all units on floors)	30% Chrysotile	Friable
EH-41A, 41B	Black sink undercoating with gasket and putty	3 rd floor – Unit 313 kitchen (assumed in all units on floors)	2% Chrysotile	Non-Friable
EH-42A	Blue wallpaper and adhesive on gypsum wallboard	Throughout 3 rd floor	No Asbestos Detected	Friable

5.2 XRF Testing Results

Table 4 contains the XRF testing results found throughout the plumbing renovation pathway, including all common areas and units 111, 113, 211, 213, 311 and 313 in the Eastridge House located at 120 West Sunset Way in Issaquah, Washington. Bolded readings indicate lead-based paint or coating and *Italicized bold* readings indicate lead-containing paint or coating.

Table 4 – XRF Results

Date	Reading	Lead Based	Lead Containing	*Pb	Pb +/-	Unit / Bldg.	Room Type	Side	Component	Substrate	Color	Condition
15-Feb-13	1	NA	NA					Standard				
15-Feb-13	2	NA	NA	0	0	Eastside House	Calibration	Calibration		Calibration	White	Calibration
15-Feb-13	3	NA	NA	1.01	0.03	Eastside House	Calibration	Calibration		Calibration	Red	Calibration
15-Feb-13	4	NA	NA	1.15	0.08	Eastside House	Calibration	Calibration		Calibration	Red	Calibration
15-Feb-13	5	NA	NA	1.01	0.03	Eastside House	Calibration	Calibration		Calibration	Red	Calibration
15-Feb-13	6	Negative	Negative	0	0	Eastside House	Floor 1 - Hallway	East	Wall	Drywall	Off White	Intact
15-Feb-13	7	Negative	Negative	0	0	Eastside House	Floor 1 - Hallway	East	Wall	Drywall	Off White	Intact
15-Feb-13	8	Negative	Negative	0	0	Eastside House	Floor 1 - Hallway	Ceiling	Ceiling	Drywall	White	Intact
15-Feb-13	9	Negative	Positive	0.04	0.02	Eastside House	Common Men's Restroom	West	Wall	Drywall	White	Intact
15-Feb-13	10	Negative	Negative	0	0	Eastside House	Common Men's Restroom	Ceiling	Ceiling	Drywall	White	Intact
15-Feb-13	11	Negative	Positive	0.02	0.02	Eastside House	Common Kitchen	South	Wall	Drywall	White	Intact
15-Feb-13	12	Negative	Positive	0.03	0.02	Eastside House	Common Kitchen	South	Wall	Drywall	White	Intact
15-Feb-13	13	Negative	Negative	0	0	Eastside House	Chair Storage	East	Wall	Drywall	White	Intact

THIRD PARTY REPORTS - D.2

Date	Reading	Lead Based	Lead Containing	*Pb	Pb +/-	Unit / Bldg.	Room Type	Side	Component	Substrate	Color	Condition
15-Feb-13	14	NA	NA					Standard				
15-Feb-13	15	Negative	Negative	0	0	Eastside House	Garbage Room	Ceiling	Ceiling	Drywall	White	Intact
15-Feb-13	16	Negative	Negative	0	0	Eastside House	Floor 1 - Janitor's Closet	Ceiling	Ceiling	Drywall	White	Intact
15-Feb-13	17	NA	NA					Standard				
15-Feb-13	18	Negative	Positive	0.1	0.08	Eastside House	Unit 111 - Kitchen	East	Wall	Drywall	White	Intact
15-Feb-13	19	Negative	Negative	0	0	Eastside House	Unit 111 - Bathroom	North	Wall	Drywall	White	Intact
15-Feb-13	20	Negative	Negative	0	0	Eastside House	Unit 113 - Bathroom	North	Wall	Drywall	White	Intact
15-Feb-13	21	Negative	Negative	0	0	Eastside House	Unit 113 - Bathroom	North	Wall	Drywall	White	Intact
15-Feb-13	22	Negative	Negative	0	0	Eastside House	Unit 113 - Kitchen	West	Wall	Drywall	White	Intact
15-Feb-13	23	Negative	Negative	0	0.01	Eastside House	Floor 2 - Laundry Room	East	Wall	Drywall	White	Intact
15-Feb-13	24	Negative	Positive	0.01	0.01	Eastside House	Floor 2 - Laundry Room	Ceiling	Ceiling	Drywall	White	Intact
15-Feb-13	25	Negative	Negative	0	0	Eastside House	Floor 2 - Hallway	East	Wall	Drywall	Off White	Intact
15-Feb-13	26	Negative	Negative	0	0	Eastside House	Floor 2 - Hallway	East	Wall	Drywall	Off White	Intact
15-Feb-13	27	Negative	Negative	0	0	Eastside House	Floor 2 - Hallway	Ceiling	Ceiling	Drywall	White	Intact
15-Feb-13	28	Negative	Positive	0.02	0.02	Eastside House	Floor 2 - Janitor's Closet	Ceiling	Ceiling	Drywall	White	Intact
15-Feb-13	29	Negative	Positive	0.01	0.01	Eastside House	Floor 2 - Janitor's Closet	West	Wall	Drywall	White	Intact

THIRD PARTY REPORTS - D.2

Date	Reading	Lead Based	Lead Containing	*Pb	Pb +/-	Unit / Bldg.	Room Type	Side	Component	Substrate	Color	Condition
15-Feb-13	30	Negative	Negative	0	0	Eastside House	Unit 211 - Bathroom	North	Wall	Drywall	White	Intact
15-Feb-13	31	Negative	Positive	0.02	0.03	Eastside House	Unit 211 - Kitchen	Ceiling	Ceiling	Drywall	White	Intact
15-Feb-13	32	Negative	Positive	0.01	0.02	Eastside House	Unit 211 - Kitchen	North	Wall	Drywall	White	Intact
15-Feb-13	33	Negative	Negative	0	0	Eastside House	Unit 213 - Kitchen	South	Wall	Drywall	White	Intact
15-Feb-13	34	Negative	Negative	0	0	Eastside House	Unit 213 - Bathroom	North	Wall	Drywall	White	Intact
15-Feb-13	35	Negative	Negative	0	0	Eastside House	Unit 213 - Bedroom Closet	North	Wall	Drywall	White	Intact
15-Feb-13	36	NA	NA					Standard				
15-Feb-13	37	Negative	Negative	0	0	Eastside House	Unit 313 - Bedroom Closet	North	Wall	Drywall	White	Peeling
15-Feb-13	38	Negative	Negative	0	0	Eastside House	Unit 313 - Bathroom	North	Wall	Drywall	White	Peeling
15-Feb-13	39	Negative	Positive	0.02	0.04	Eastside House	Unit 313 - Kitchen	South	Wall	Drywall	White	Intact
15-Feb-13	40	Negative	Positive	0.03	0.03	Eastside House	Unit 311 - Kitchen	South	Wall	Drywall	White	Intact
15-Feb-13	41	Negative	Negative	0	0	Eastside House	Unit 311 - Bedroom Closet	North	Wall	Drywall	White	Intact
15-Feb-13	42	Negative	Positive	0.02	0.02	Eastside House	Unit 311 - Bathroom	North	Wall	Drywall	White	Intact
15-Feb-13	43	Positive	Positive	1	0.02	Eastside House	Floor 3 - Laundry Room	West	Wall	Drywall	White	Intact
15-Feb-13	44	Positive	Positive	1	0.14	Eastside House	Floor 3 - Laundry Room	West	Wall	Drywall	White	Intact
15-Feb-13	45	Positive	Positive	1	0.02	Eastside House	Floor 3 - Laundry Room	Ceiling	Ceiling	Drywall	White	Intact

THIRD PARTY REPORTS - D.2

Date	Reading	Lead Based	Lead Containing	*Pb	Pb +/-	Unit / Bldg.	Room Type	Side	Component	Substrate	Color	Condition
15-Feb-13	46	Negative	Negative	0	0	Eastside House	Floor 3 - Hallway	Ceiling	Ceiling	Drywall	White	Intact
15-Feb-13	47	Negative	Negative	0	0	Eastside House	Floor 3 - Hallway	East	Wall	Drywall	White	Intact
15-Feb-13	48	Negative	Positive	0.03	0.02	Eastside House	Floor 3 - Janitor's Closet	West	Wall	Drywall	White	Intact
15-Feb-13	49	Negative	Positive	0.02	0.02	Eastside House	Floor 3 - Janitor's Closet	Ceiling	Ceiling	Drywall	White	Intact
15-Feb-13	50	NA	NA					Standard				
15-Feb-13	51	Negative	Positive	0.07	0.03	Eastside House	Exterior	East	Wall	Wood	Brown	Intact
15-Feb-13	52	Negative	Positive	0.09	0.03	Eastside House	Exterior	East	Wall	Wood	Brown	Intact
15-Feb-13	53	NA	NA	1.09	0.05	Eastside House	Calibration	Calibration		Calibration	Red	Calibration
15-Feb-13	54	NA	NA	1.14	0.06	Eastside House	Calibration	Calibration		Calibration	Red	Calibration
15-Feb-13	55	NA	NA	1.03	0.03	Eastside House	Calibration	Calibration		Calibration	Red	Calibration
15-Feb-13	56	NA	NA	0	0	Eastside House	Calibration	Calibration		Calibration	White	Calibration

6.0 CONCLUSIONS AND RECOMENDATIONS

Extreme caution should be used during any renovation activities to ensure that additional materials are not uncovered. This report should be presented to any contractor or subcontractor participating in the plumbing renovation at the Eastridge House located at 120 West Sunset Way in Issaquah, Washington. In the event that additional materials are discovered, the material should be sampled and analyzed to determine if it contains asbestos prior to disturbance.

6.1 Asbestos

Asbestos-containing materials are required to be removed and disposed of in accordance with Washington State Regulations prior to any demolition, renovation, or remodeling that would disturb these materials. Washington State Department of Labor and Industries and PSCAA require that the abatement be performed using Certified Asbestos Workers under the direct on-site supervision of a Certified Asbestos Supervisor.

Materials that contain <1% asbestos (i.e. gypsum wall board and joint compound materials) are not regulated for disposal purposes. However, removal of materials containing <1% asbestos is considered an unclassified asbestos operation by OSHA and WISHA. Unclassified asbestos operations cover employees likely to be exposed in excess of the airborne asbestos permissible exposure limit (PEL), and who are performing operations not covered by Class I through IV. For construction work involving unclassified asbestos operations, the applicable requirements will include: an airborne exposure assessment, use of vacuum cleaners equipped with HEPA filters, use of wet methods and prompt cleanup of debris, use of respirators and protective clothing, training, and record keeping. The requirements for the removal of <1% wallboard systems are addressed in WRD 23.30, which is attached for your convenience.

RGA recommends that a Certified Asbestos Project Designer design any asbestos abatement job to ensure that the job is completed according to regulation standards.

6.2 Lead

Based on XRF testing, 3 of the 4 paint coatings tested by RGA contained detectable and reportable quantities of lead and 2 of them contained lead-based paint throughout the plumbing renovation pathway in the Eastridge House located at 120 West Sunset Way in Issaquah, Washington. The presence of lead in coatings raises concerns about worker and environmental protection. Special precautions will need to be taken to renovate the building. The recommendations are addressed in the Regulatory Compliance Section above.

7.0 LIMITS OF SURVEY

This report does not represent all conditions at the subject site as it only reflects the information gathered from the applicable and accessible plumbing renovation pathway, including common areas and units 111, 111, 113, 211, 213, 311 and 313 in the Eastridge House as outlined by the client. RGA's observations and sampling included all accessible interior areas and observation or sampling of inaccessible areas such as behind closed walls or within ductwork was not within the scope of RGA's work and was not performed.

This report was prepared pursuant to the contract RGA has with the client. Unauthorized reliance on or use of this report, including any of its information or conclusions, will be at third party's risk. For the same reasons, no warranties or representations, expressed or implied in this report, are made to any such third party. Contact us at 206-281-8858 with any questions.



Attachment 1

RGA Asbestos Laboratory Results



1730 Minor Avenue, Suite 900, Seattle, WA 98101
 OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
 (EPA 600/R-93/116)



NVLAP LAB CODE 200613-0

King County Housing Authority

Project Location: 120 West Sunset Way
 Issaquah, WA

RGA Batch Number: **13-0423**

RGA Project Number: **KCHA32114**

Number of Samples: **59**


Report Key				
Client Sample ID	Layer ID (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
RGA Lab ID	Layer Description	Layer Comments (if applicable)		

EH-01A 13004153	L-1 Beige paint	No Asbestos Detected		100% Paint
	L-2 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: First positive stop.			
	L-3 Tan fibrous material	No Asbestos Detected	100% Cellulose	
	L-4 White blocky crystalline material	No Asbestos Detected		80% Gypsum Filler and Binder 20% Mineral Particles

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Sampled By: John McCaslin
 Received By: Abdulrazzak Mansur 2/19/2013
 Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013





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Report Key				
Client Sample ID	Layer ID (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
RGA Lab ID	Layer Description	Layer Comments (if applicable)		
EH-02A 13004156	L-1 Beige paint	No Asbestos Detected		100% Paint
	L-2 White crystalline material	2% Chrysotile	13% Mineral Wool	85% Calcite Filler and Binder
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-3 White fibrous material	No Asbestos Detected	100% Cellulose	
	L-4 White crystalline material	2% Chrysotile	85% Calcite Filler and Binder 13% Mineral Particles	
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
L-5 Tan fibrous material	No Asbestos Detected	100% Cellulose		
L-6 White blocky crystalline material	No Asbestos Detected	80% Gypsum Filler and Binder 20% Mineral Particles		

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Number of Samples: **59**

Report Key				
Client Sample ID	Layer ID (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
RGA Lab ID	Layer Description	Layer Comments (if applicable)		
EH-02B 13004157	L-1 Beige paint	No Asbestos Detected		100% Paint
	L-2 White crystalline material	2% Chrysotile	85% Calcite Filler and Binder 13% Mineral Particles	
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-3 White fibrous material	No Asbestos Detected	100% Cellulose	
	L-4 White crystalline material	2% Chrysotile	85% Calcite Filler and Binder 13% Mineral Particles	
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
L-5 Tan fibrous material	No Asbestos Detected	100% Cellulose		
L-6 White blocky crystalline material	No Asbestos Detected	80% Gypsum Filler and Binder 20% Mineral Particles		

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Report Key				
Client Sample ID	Layer ID (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
RGA Lab ID	Layer Description			
	Layer Comments (if applicable)			

EH-02C 13004158	L-1 Beige paint	No Asbestos Detected		100% Paint
	L-2 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-3 White fibrous material	No Asbestos Detected	100% Cellulose	
	L-4 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
EH-03A 13004159	L-5 Tan fibrous material	No Asbestos Detected	100% Cellulose	
	L-6 Brown blocky crystalline material	No Asbestos Detected		80% Gypsum Filler and Binder 20% Mineral Particles


EH-03A 13004159	White fibrous material	No Asbestos Detected	35% Cellulose	50% Resin and Binder 15% Filler and Binder
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EH-04A 13004160	L-1 Beige adhesive	No Asbestos Detected		80% Resin and Binder 20% Mineral Particles
	L-2 White fibrous material	No Asbestos Detected	35% Cellulose	50% Resin and Binder 15% Filler and Binder

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King County Housing Authority

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 Issaquah, WA

RGA Batch Number: **13-0423**

RGA Project Number: **KCHA32114**


Number of Samples: **59**

Report Key				
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-04C 13004162	Beige adhesive	No Asbestos Detected		80% Resin and Binder 20% Mineral Particles
EH-05A 13004163	L-1 Multi-color fibrous material	No Asbestos Detected	100% Synthetic	
	L-2 White plastic weave	No Asbestos Detected		100% Plastic Particles
	L-3 Yellow adhesive	No Asbestos Detected		90% Resin and Binder 10% Mineral Particles
EH-05B 13004164	L-1 Multi-color fibrous material	No Asbestos Detected	100% Synthetic	
	L-2 White plastic weave	No Asbestos Detected		100% Plastic Particles
	L-3 White adhesive	No Asbestos Detected		90% Resin and Binder 10% Mineral Particles
EH-06A 13004166	L-1 White paint	No Asbestos Detected		100% Paint
	L-2 Tan fibrous material	No Asbestos Detected	50% Mineral Wool 30% Cellulose	20% Filler and Binder

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NVLAP LAB CODE 200613-0

King County Housing Authority

Project Location: 120 West Sunset Way
 Issaquah, WA

RGA Batch Number: **13-0423**

RGA Project Number: **KCHA32114**


Number of Samples: **59**

Report Key				
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-06B 13004167	L-1 White paint	No Asbestos Detected		100% Paint
	L-2 Tan fibrous material	No Asbestos Detected	50% Mineral Wool 30% Cellulose	20% Filler and Binder
EH-07A 13004168	L-1 Brown adhesive	<1% Tremolite		85% Resin and Binder >14% Mineral Particles
	L-2 Beige adhesive	No Asbestos Detected		90% Resin and Binder 10% Mineral Particles
EH-07B 13004169	Brown adhesive	<1% Tremolite		85% Resin and Binder >14% Mineral Particles
EH-08B 13004171	L-1 Beige vinyl tile	No Asbestos Detected		50% Vinyl Filler and Binder 40% Calcite Filler and Binder 10% Mineral Particles
	L-2 Black asphaltic material	3% Chrysotile		90% Asphalt Filler and Binder 7% Mineral Particles
Layer Comments: First positive stop.				
EH-09A 13004173	White resinous material	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles

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Analyzed By: Allison Reagan 2/27/2013





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Bulk Asbestos Fiber Analysis
 (EPA 600/R-93/116)



NVLAP LAB CODE 200613-0

King County Housing Authority

Project Location: 120 West Sunset Way
 Issaquah, WA

RGA Batch Number: **13-0423**

RGA Project Number: **KCHA32114**

Number of Samples: **59**

Report Key				
Client Sample ID	Layer ID (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
RGA Lab ID	Layer Description			
	Layer Comments (if applicable)			


EH-10A 13004174	L-1 White fibrous material	No Asbestos Detected	100% Cellulose	
	L-2 White fibrous weave	No Asbestos Detected	100% Glass Fiber	
	L-3 Silver foil	No Asbestos Detected		100% Foil
	L-4 Yellow adhesive	No Asbestos Detected		95% Resin and Binder 5% Filler and Binder
	L-5 Yellow fibrous material	No Asbestos Detected	100% Fiberglass	

EH-10C 13004176	L-1 White fibrous material	No Asbestos Detected	100% Cellulose	
	L-2 White fibrous weave	No Asbestos Detected	100% Glass Fiber	
	L-3 Silver foil	No Asbestos Detected		100% Foil
	L-4 Yellow adhesive	No Asbestos Detected		95% Resin and Binder 5% Filler and Binder
	L-5 Yellow fibrous material	No Asbestos Detected	100% Fiberglass	

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Number of Samples: **59**

Report Key				
Client Sample ID	Layer ID (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
RGA Lab ID	Layer Description			
	Layer Comments (if applicable)			

EH-11A 13004177	L-1 White fibrous weave	No Asbestos Detected	100% Cellulose	
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	L-2 White powdery material	3% Amosite		75% Calcite Filler and Binder 22% Mineral Particles
	Layer Comments: First positive stop.			

EH-12A 13004179	L-1 Black/tan fibrous asphaltic material	No Asbestos Detected	60% Cellulose	40% Asphalt Filler and Binder
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	L-2 Black fibrous material	No Asbestos Detected	100% Fiberglass	
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EH-13A 13004180	Black hard rubbery material	No Asbestos Detected		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles
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EH-14A 13004181	L-1 Black asphaltic material	2% Chrysotile		85% Asphalt Filler and Binder 13% Mineral Particles
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	L-2 Beige resinous material	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles
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	L-3 Black fibrous material	No Asbestos Detected	100% Cellulose	
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Number of Samples: **59**

Report Key				
Client Sample ID	Layer ID (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
RGA Lab ID	Layer Description			
	Layer Comments (if applicable)			
EH-15A 13004182	L-1 Gray resinous material	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles
	L-2 Beige resinous material	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles
	L-3 Gray resinous fibrous material	5% Chrysotile		85% Resin and Binder 10% Mineral Particles
EH-16A 13004183	L-1 Beige vinyl tile	2% Chrysotile		50% Vinyl Filler and Binder 40% Calcite Filler and Binder 8% Mineral Particles
	L-2 Black asphaltic material	2% Chrysotile		90% Asphalt Filler and Binder 8% Mineral Particles
	Layer Comments: First positive stop.			
	Layer Comments: First positive stop.			

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Report Key				
Client Sample ID	Layer ID (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
RGA Lab ID	Layer Description			
	Layer Comments (if applicable)			

EH-17A 13004186	L-1 Beige paint	No Asbestos Detected		100% Paint
	L-2 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-3 White fibrous material	No Asbestos Detected	100% Cellulose	
	L-4 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-5 Tan fibrous material	No Asbestos Detected	100% Cellulose	
L-6 White blocky crystalline material	No Asbestos Detected		80% Gypsum Filler and Binder 20% Mineral Particles	
L-7 Brown adhesive		<1% Tremolite		85% Resin and Binder >14% Mineral Particles

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Number of Samples: **59**


Report Key				
Client Sample ID	Layer ID (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
RGA Lab ID	Layer Description	Layer Comments (if applicable)		

EH-17C 13004188	L-1 Beige paint	No Asbestos Detected		100% Paint
	L-2 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-3 White fibrous material	No Asbestos Detected	100% Cellulose	
	L-4 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	L-5 Tan fibrous material	No Asbestos Detected	100% Cellulose	
EH-18A 13004189	L-6 White blocky crystalline material	No Asbestos Detected		80% Gypsum Filler and Binder 20% Mineral Particles
	Beige adhesive	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles

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Number of Samples: **59**

Report Key				
Client Sample ID	Layer ID (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
RGA Lab ID	Layer Description			
	Layer Comments (if applicable)			

EH-19A 13004190	L-1 White paint	No Asbestos Detected		100% Paint
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	L-2 Beige crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: First positive stop.			

	L-3 Tan fibrous material	No Asbestos Detected	100% Cellulose	
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EH-20A 13004192	Black hard rubbery material	No Asbestos Detected		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles
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EH-21A 13004193	L-1 Yellow adhesive	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles
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	L-2 Brown adhesive	<1% Tremolite		85% Resin and Binder >14% Mineral Particles
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	L-3 Beige crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
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EH-21B 13004194	L-1 White adhesive	No Asbestos Detected		80% Resin and Binder 20% Mineral Particles
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	L-2 Beige crystalline material	No Asbestos Detected		85% Calcite Filler and Binder 15% Mineral Particles
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Number of Samples: **59**

Report Key				
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-22A 13004195	L-1 Beige vinyl sheeting	No Asbestos Detected		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles
	L-2 Gray fibrous backing	No Asbestos Detected	60% Cellulose	40% Filler and Binder
	L-3 White adhesive	No Asbestos Detected		90% Resin and Binder 10% Mineral Particles
EH-22B 13004196	L-1 Gray vinyl sheeting	No Asbestos Detected		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles
	L-2 Gray fibrous backing	No Asbestos Detected	60% Cellulose	40% Filler and Binder
	L-3 Yellow adhesive	No Asbestos Detected		90% Resin and Binder 10% Mineral Particles

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Report Key				
Client Sample ID	Layer ID (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
RGA Lab ID	Layer Description			
	Layer Comments (if applicable)			

EH-23A 13004197	L-1 White paint	No Asbestos Detected		100% Paint
	L-2 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-3 White fibrous material	No Asbestos Detected	100% Cellulose	
	L-4 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
EH-23B 13004198	L-5 Tan fibrous material	No Asbestos Detected	100% Cellulose	
	L-6 White blocky crystalline material	No Asbestos Detected		80% Gypsum Filler and Binder 20% Mineral Particles
	L-1 White crystalline material	No Asbestos Detected		85% Calcite Filler and Binder 15% Mineral Particles
	L-2 Tan fibrous material	No Asbestos Detected	100% Cellulose	
	L-3 White blocky crystalline material	No Asbestos Detected		80% Gypsum Filler and Binder 20% Mineral Particles

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Number of Samples: **59**


Report Key				
Client Sample ID	Layer ID (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
RGA Lab ID	Layer Description			
	Layer Comments (if applicable)			

EH-24A 13004199	L-1 White paint	No Asbestos Detected		100% Paint
	L-2 Beige crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: First positive stop.			
	L-3 Tan fibrous material	No Asbestos Detected	100% Cellulose	
EH-25A 13004201	L-1 Gray resinous material	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles
	L-2 Brown fibrous material	No Asbestos Detected	100% Cellulose	
	L-3 Beige resinous material	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles
EH-25B 13004202	L-1 Gray resinous material	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles
	L-2 Black hard rubbery material	No Asbestos Detected		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles

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Number of Samples: **59**

Report Key				
Client Sample ID	Layer ID (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
RGA Lab ID	Layer Description			
	Layer Comments (if applicable)			

EH-26A 13004203	L-1 White fibrous material	No Asbestos Detected	35% Cellulose	50% Resin and Binder 15% Filler and Binder
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L-2 Beige adhesive	No Asbestos Detected		90% Resin and Binder 10% Mineral Particles
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EH-27A 13004204	L-1 White paint	No Asbestos Detected		100% Paint
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L-2 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
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Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.

L-3 White fibrous material	No Asbestos Detected	100% Cellulose	
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L-4 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
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Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.


L-5 Tan fibrous material	No Asbestos Detected	100% Cellulose	
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L-6 White blocky crystalline material	No Asbestos Detected		80% Gypsum Filler and Binder 20% Mineral Particles
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Number of Samples: **59**

Report Key				
Client Sample ID	Layer ID (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
RGA Lab ID	Layer Description	Layer Comments (if applicable)		
EH-27B 13004205	L-1 White paint	No Asbestos Detected		100% Paint
	L-2 White crystalline material	2% Chrysotile	85% Calcite Filler and Binder 13% Mineral Particles	
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-3 White fibrous material	No Asbestos Detected	100% Cellulose	
	L-4 White crystalline material	2% Chrysotile	85% Calcite Filler and Binder 13% Mineral Particles	
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
L-5 Tan fibrous material	No Asbestos Detected	100% Cellulose		
L-6 White blocky crystalline material	No Asbestos Detected	80% Gypsum Filler and Binder 20% Mineral Particles		

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Number of Samples: **59**

Report Key				
Client Sample ID	Layer ID (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
RGA Lab ID	Layer Description			
	Layer Comments (if applicable)			

EH-28A 13004206	L-1 White paint	No Asbestos Detected		100% Paint
	L-2 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	L-3 White fibrous material	No Asbestos Detected	100% Cellulose	
	L-4 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles


EH-28B 13004207	L-1 White paint	No Asbestos Detected		100% Paint
	L-2 Beige crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles

EH-29A 13004208	L-1 Brown adhesive	<1% Tremolite		85% Resin and Binder >14% Mineral Particles
	L-2 Beige adhesive	No Asbestos Detected		80% Resin and Binder 20% Mineral Particles
	L-3 Beige crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles

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Number of Samples: **59**

Report Key				
Client Sample ID	Layer ID (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
RGA Lab ID	Layer Description			
	Layer Comments (if applicable)			
EH-30A 13004209	L-1 Beige vinyl sheeting	No Asbestos Detected		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles
	L-2 Gray fibrous backing	No Asbestos Detected	60% Cellulose	40% Filler and Binder
	L-3 Beige adhesive	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles
	L-4 Green vinyl sheeting	No Asbestos Detected		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles
	L-5 Gray fibrous backing	30% Chrysotile	30% Cellulose	40% Filler and Binder
	L-6 Beige adhesive	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles

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Sampled By: John McCaslin
 Received By: Abdulrazzak Mansur 2/19/2013
 Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013





1730 Minor Avenue, Suite 900, Seattle, WA 98101
 OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis
 (EPA 600/R-93/116)



NVLAP LAB CODE 200613-0

King County Housing Authority

Project Location: 120 West Sunset Way
 Issaquah, WA

RGA Batch Number: **13-0423**

RGA Project Number: **KCHA32114**


Number of Samples: **59**

Report Key				
Client Sample ID	Layer ID (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
RGA Lab ID	Layer Description			
Layer Comments (if applicable)				
EH-31A 13004210	L-1 White paint	No Asbestos Detected		100% Paint
	L-2 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-3 White fibrous material	No Asbestos Detected	100% Cellulose	
	L-4 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
L-5 Tan fibrous material	No Asbestos Detected	100% Cellulose		
L-6 White blocky crystalline material	No Asbestos Detected		80% Gypsum Filler and Binder 20% Mineral Particles	

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Bulk Asbestos Fiber Analysis
 (EPA 600/R-93/116)



NVLAP LAB CODE 200613-0

King County Housing Authority

Project Location: 120 West Sunset Way
 Issaquah, WA

RGA Batch Number: **13-0423**

RGA Project Number: **KCHA32114**

Number of Samples: **59**


Report Key				
Client Sample ID	Layer ID (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
RGA Lab ID	Layer Description	Layer Comments (if applicable)		

EH-31B 13004211	L-1 White paint	No Asbestos Detected	100% Paint	
	L-2 White crystalline material	2% Chrysotile	85% Calcite Filler and Binder 13% Mineral Particles	
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-3 White fibrous material	No Asbestos Detected	100% Cellulose	
	L-4 White crystalline material	2% Chrysotile	85% Calcite Filler and Binder 13% Mineral Particles	
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
EH-32A 13004212	L-1 White paint	No Asbestos Detected	100% Paint	
	L-2 Beige crystalline material	2% Chrysotile	85% Calcite Filler and Binder 13% Mineral Particles	
	Layer Comments: First positive stop.			
	L-3 Tan fibrous material	No Asbestos Detected	100% Cellulose	

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Bulk Asbestos Fiber Analysis
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NVLAP LAB CODE 200613-0

King County Housing Authority

Project Location: 120 West Sunset Way
 Issaquah, WA

RGA Batch Number: **13-0423**

RGA Project Number: **KCHA32114**


Number of Samples: **59**

Report Key				
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-33A 13004214	L-1 White resinous fibrous material	No Asbestos Detected	20% Cellulose	65% Resin and Binder 15% Mineral Particles
	L-2 Beige resinous material	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles
	L-3 Brown fibrous material	No Asbestos Detected	100% Cellulose	
EH-34A 13004215	Brown adhesive	<1% Tremolite		85% Resin and Binder >14% Mineral Particles
EH-34B 13004216	Brown adhesive	<1% Tremolite		85% Resin and Binder >14% Mineral Particles
EH-35A 13004217	L-1 Green vinyl sheeting	No Asbestos Detected		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles
	L-2 Gray fibrous backing	30% Chrysotile	30% Cellulose	40% Filler and Binder
	Layer Comments: First positive stop.			
L-3 Yellow adhesive	No Asbestos Detected		90% Resin and Binder 10% Mineral Particles	

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NVLAP LAB CODE 200613-0

King County Housing Authority

Project Location: 120 West Sunset Way
 Issaquah, WA

RGA Batch Number: **13-0423**

RGA Project Number: **KCHA32114**


Number of Samples: **59**

Report Key				
Client Sample ID	Layer ID (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
RGA Lab ID	Layer Description			
	Layer Comments (if applicable)			
EH-36A 13004219	L-1 Black asphaltic material	2% Chrysotile		90% Asphalt Filler and Binder 8% Mineral Particles
	L-2 Black fibrous material	No Asbestos Detected	100% Cellulose	
	L-3 Beige resinous material	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles
EH-37A 13004220	L-1 White paint	No Asbestos Detected		100% Paint
	L-2 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-3 White fibrous material	No Asbestos Detected	100% Cellulose	
	L-4 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
L-5 Tan fibrous material	No Asbestos Detected	100% Cellulose		
L-6 White blocky crystalline material	No Asbestos Detected		80% Gypsum Filler and Binder 20% Mineral Particles	

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King County Housing Authority

Project Location: 120 West Sunset Way
 Issaquah, WA

RGA Batch Number: **13-0423**

RGA Project Number: **KCHA32114**

Number of Samples: **59**

Report Key				
Client Sample ID	Layer ID (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
RGA Lab ID	Layer Description			
	Layer Comments (if applicable)			

EH-37B 13004221	L-1 White paint	No Asbestos Detected		100% Paint
	L-2 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
	L-3 White fibrous material	No Asbestos Detected	100% Cellulose	
	L-4 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.			
EH-38A 13004222	L-5 Tan fibrous material	No Asbestos Detected	100% Cellulose	
	L-6 White blocky crystalline material	No Asbestos Detected		80% Gypsum Filler and Binder 20% Mineral Particles
	L-1 White paint	No Asbestos Detected		100% Paint
EH-38A 13004222	L-2 Beige crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: First positive stop.			
	L-3 Tan fibrous material	No Asbestos Detected	100% Cellulose	

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Analyzed By: Allison Reagan 2/27/2013



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Bulk Asbestos Fiber Analysis
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King County Housing Authority

Project Location: 120 West Sunset Way
 Issaquah, WA

RGA Batch Number: **13-0423**

RGA Project Number: **KCHA32114**

Number of Samples: **59**

Report Key				
Client Sample ID	Layer ID (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
RGA Lab ID	Layer Description			
	Layer Comments (if applicable)			
EH-39A 13004224	L-1 Beige adhesive	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles
	L-2 Brown adhesive	<1% Tremolite		85% Resin and Binder >14% Mineral Particles
EH-40A 13004225	L-1 Beige vinyl sheeting	No Asbestos Detected		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles
	L-2 Gray fibrous backing	No Asbestos Detected	60% Cellulose	40% Filler and Binder
	L-3 Yellow adhesive	No Asbestos Detected		90% Resin and Binder 10% Mineral Particles
	L-4 Green vinyl sheeting	No Asbestos Detected		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles
	L-5 Gray fibrous backing	30% Chrysotile	30% Cellulose	40% Filler and Binder
	L-6 Yellow adhesive	No Asbestos Detected		90% Resin and Binder 10% Mineral Particles

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Bulk Asbestos Fiber Analysis
 (EPA 600/R-93/116)



NVLAP LAB CODE 200613-0

King County Housing Authority

Project Location: 120 West Sunset Way
 Issaquah, WA

RGA Batch Number: **13-0423**

RGA Project Number: **KCHA32114**


Number of Samples: **59**

Report Key				
Client Sample ID	Layer ID (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
RGA Lab ID	Layer Description			
	Layer Comments (if applicable)			
EH-41A 13004226	L-1 Black asphaltic material	2% Chrysotile		90% Asphalt Filler and Binder 8% Mineral Particles
	Layer Comments: First positive stop.			
	L-2 Brown fibrous material	No Asbestos Detected	100% Cellulose	
	L-3 Beige resinous material	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles
EH-42A 13004228	L-1 White fibrous material	No Asbestos Detected	35% Cellulose	50% Resin and Binder 15% Filler and Binder
	L-2 Beige adhesive	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles

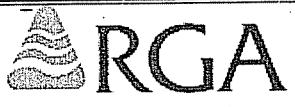
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Sampled By: John McCaslin
 Received By: Abdulrazzak Mansur 2/19/2013
 Reviewed By: Aruna Turaga 2/27/2013

Analyzed By: Allison Reagan 2/27/2013



13-0423



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RGA CLIENT: King County Housing Authority

ACM BULK SAMPLE DATA SHEET

* PLM Analysis

X Stop Analysis at First Positive

PAGE 1 OF 8

Analyze All Samples

Point Count Analysis (400-point)

Project Name/Address: 120 West Sunset Way Issaquah, WA.

Samples Submitted 46

RGA Project #: KCHA32114

Sampled By JMC/RB

Sample Date: 2/15/2013

Sample(s) Sent To: X RGA EMSL Other:

TAT: Rush 24Hrs 48Hrs X 3-5 Days

FAX OR E-MAIL REPORT TO: SEE ABOVE PROJECT MANAGER (PM)

***ADDITIONAL REPORT RECIPIENT(S): Angela JMC/RB ***

HM#	Material Description	Sample ID	Sample Location & Material Location	Quantity:
01	Texture on GWB Walls/Ceilings - Hallways	EH-01A	Floor 1 - E Hallway - E End	
		-01B	Floor 2 - ↓ ↓	
		-01C	Floor 3 - ↓ ↓	
02	GWB on Walls/Ceilings w/ Joint Compound - Hallways	EH-02A	Floor 1 - E Hallway - E End	
		-02B	Floor 2 ↓ ↓	
		-02C	Floor 3 ↓ ↓	
03	Light Green Wallpaper on GWB	EH-03A	Floor 1 - E Hallway - E End	
		EH-03B	Floor 2	
04	Mastic Assoc. w/ 4" Tan Covebase (Beige)	EH-04A	Floor 1 - E Hallway - E End	
		EH-04B	Floor 2 ↓ ↓	
		EH-04C	Floor 3 ↓ ↓	
05	Mastic Beneath Blue/Tan Carpet	EH-05A	Floor 1 - E Hallway - E End	
		EH-05B	Floor 2 - ↓ ↓	
		EH-05C	Floor 3 - ↓ ↓	
06	Suspended Ceiling Tile - 2'x4' - White Wornhole	EH-06A	Floor 1 - E Hallway - E End	
		EH-06B	Floor 2 - ↓ ↓	

Relinquished By: John McCaskle

Signature: [Signature] Date/Time: 2/15/2013 1730

Received By:

Signature: [Signature] Date/Time:

Relinquished By:

Signature: [Signature] Date/Time:

Received By: RAZ MANSOURI

Signature: [Signature] Date/Time: 2/19/13



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RGA CLIENT: King County Housing Authority

ACM BULK SAMPLE DATA SHEET

* PLM Analysis

X Stop Analysis at First Positive PAGE 2 OF 3

Analyze All Samples

Point Count Analysis (400-point)

Project Name/Address: 120 West Sunset Way Issaquah, WA.

Samples Submitted 76

RGA Project #: KCHA32114

Sampled By: [Signature] / 02/15/2013

Sample Date: 2/15/2013

Sample(s) Sent To: X RGA EMSL Other: TAT: Rush 24Hrs 48Hrs X 3-5 Days

FAX OR E-MAIL REPORT TO: SEE ABOVE PROJECT MANAGER (PM)

ADDITIONAL REPORT RECIPIENT(S): Angela

HM#	Material Description:	Sample Location & Material Location	Quantity:
07	Mastic Assoc. w/ 1/4" Tan Covebase (Brown)		
EH-07A		Floor 1 - Men's Restroom - W Side	
EH-07B		↓ - Common Kitchen - E Side	
08	Beige/Tan Speckled Vinyl Floor Sheeting w/ Mastic		
EH-08A		Floor 1 - Men's Restroom - W Side	
-08B		↓ - Kitchen - E Side	
-08C		Floor 2 - Laundry Room - S Side	
09	White Caulk @ Toilet		
EH-09A		Floor 1 - Men's Restroom - W Side	
10	Fiberglass Pipe Insulation w/ Cloth Wrap + Bridging		
EH-10A		Floor 1 - Men's Restroom - W Side - Inside Wall	
-10B		↓ - Chair Storage - E Side	
-10C		↓ - Unit 113 - Bathroom - N Side - Inside Wall	
11	Mudded Elbow		
EH-11A		Floor 1 - Men's Restroom - W Side - Inside Wall	
-11B		↓ - Chair Storage - E Side	
12	Black Fiberglass Insulation w/ Paper Facing in Int. Walls		
EH-12A		Floor 1 - Men's Restroom - W Side - Inside Wall	

Relinquished By: John McCaslin Signature: [Signature] Date/Time: 2/15/2013 1730
 Received By: Signature: Date/Time:
 Relinquished By: Signature: Date/Time:
 Received By: RAZ MANSURD Signature: [Signature] Date/Time: 2/15/13

13-0423

THIRD PARTY REPORTS - D2



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ACM BULK SAMPLE DATA SHEET

* PLM Analysis

X Stop Analysis at First Positive PAGE 3 OF 8

Analyze All Samples

Point Count Analysis (400-point)

Project Name/Address: 120 West Sunset Way Issaquah, WA.

Samples Submitted 76

RGA Project #: KCHA32114

Sampled By: *EH/DB*

Sample Date: 2/15/2013

Sample(s) Sent To: X RGA EMSL Other: TAT: Rush 24Hrs 48Hrs X 3-5 Days

*** FAX OR E-MAIL REPORT TO: SEE ABOVE PROJECT MANAGER (PM) ***

*** ADDITIONAL REPORT RECIPIENT(S): Angela ***

HM#	Material Description	Sample ID	Sample Location & Material Location	Quantity:
13	Black Gasket @ Sink Drain	EH-13A	Floor 1 - Men's Restroom - W Side	
14	Black Sink Undercoat w/ Gasket + Putty	EH-14A	Floor 1 - Common Kitchen - S Side	
15	Black Gasket @ Sink Drain	EH-15A	Floor 1 - Comm. Kitchen - S Side	
15	Gray Sink Undercoat w/ Gasket + Putty	EH-15A	Floor 1 - Community Area - S Side	
16	12" Beige/Tan Streak VFT w/ Mastic	EH-16A	Floor 1 - Chair Storage - E Side	
		EH-16B	Floor 2 - Janitor Closet - E Side	
		EH-16C	Floor 3 - ↓	
17	GWB w/ Joint Compound	EH-17A	Floor 1 - Chair Storage - SE Corner	
		↓ -17B	Floor 1 - Garbage Room - SE Corner	
		↓ -17C	↓ - Janitor Closet - SE Corner	

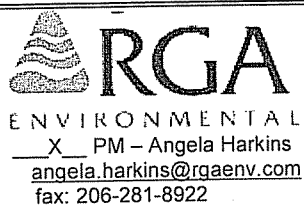
Relinquished By: *John McCluslin* Signature: *[Signature]* Date/Time: 2/15/2013 1730

Received By: _____ Signature: _____ Date/Time: _____

Relinquished By: _____ Signature: _____ Date/Time: _____

Received By: *RAC MANSURO* Signature: *[Signature]* Date/Time: 2/19/13

13-0423



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ACM BULK SAMPLE DATA SHEET

* PLM Analysis

X Stop Analysis at First Positive PAGE 4 OF 8

Analyze All Samples

Point Count Analysis (400-point)

Project Name/Address: 120 West Sunset Way Issaquah, WA.

Samples Submitted 2/15/2013 76

RGA Project #: KCHA32114

Sampled By: [Signature]

Sample Date: 2/15/2013

Sample(s) Sent To: X RGA EMSL Other: TAT: Rush 24Hrs 48Hrs X 3-5 Days

FAX OR E-MAIL REPORT TO: SEE ABOVE PROJECT MANAGER (PM)

ADDITIONAL REPORT RECIPIENT(S): Angela

HM#	Material Description:	Sample Location & Material Location	Quantity:
18	Mastic Assoc. w/ 4" Brown Corbase		
EH-18A		Floor 1 - Garbage Room - S Wall	
19	Texture on GWB Walls/Ceilings		
EH-19A		Floor 1 - Garbage Room - E Wall	
↓ -19B		↓ - Janitor Closet - E Wall	
20	Gasket @ Sink Drain		
EH-20A		Floor 1 - Janitor Closet - NW Corner	
21	Mastic Assoc. w/ 4" Tan Corbase		
EH-21A		Floor 1 - Unit 111 - Bathroom - SW corner	
EH-21A		↓ Unit 113 - ↓ - S Wall	
22	Beige/Gray Tile Pattern VFSW/mastic		
EH-22A		Floor 1 - Unit 111 - Bathroom - SW Corner	
EH-22B		↓ - Unit 113 - ↓ - S Side	
23	GWB w/ Joint Compound		
EH-23A		Floor 1 - Unit 111 - Bedroom Closet - NW Corner	
EH-23B		↓ Unit 113 - Bathroom - S Wall	

Relinquished By: John McCaslin Signature: [Signature] Date/Time: 2/15/2013 1730

Received By: Signature: Date/Time:

Relinquished By: Signature: Date/Time:

Received By: [Signature] Signature: [Signature] Date/Time: 2/19/13

13-0423

THIRD PARTY REPORTS - D2



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RGA CLIENT: King County Housing Authority

ACM BULK SAMPLE DATA SHEET

* PLM Analysis

X Stop Analysis at First Positive

PAGE 5 OF 8

Analyze All Samples

Point Count Analysis (400-point)

Project Name/Address: 120 West Sunset Way Issaquah, WA.

Samples Submitted 76

RGA Project #: KCHA32114

Sampled By: [Signature]

Sample Date: 2/15/2013

Sample(s) Sent To: X RGA EMSL Other: TAT: Rush 24Hrs 48Hrs X 3-5 Days

FAX OR E-MAIL REPORT TO: SEE ABOVE PROJECT MANAGER (PM)

ADDITIONAL REPORT RECIPIENT(S): Angela

HM#	Material Description	Sample ID	Sample Location & Material Location	Quantity:
24	Texture on GWB Walls/Ceiling			
EH-24A			Floor 1 - Unit 111 - Bedroom Closet - N Wall	
EH-24B			↓ - Unit 113 - Bathroom - S Wall	
25	Gray Sinks Undercoat w/ Gasket + Putty			
EH-25A			Floor 1 - Unit 111 - Kitchen - Sink (S Side)	
EH-25B			↓ - Unit 113 - ↓ - ↓ (W Side)	
26	Pink Wallpaper on GWB			
EH-26A			Floor 2 - E Hall Way - E End	
27	GWB w/ Joint Compound			
EH-27A			Floor 2 - Laundry Room - NW Corner	
EH-27B			FLOOR 3 - ↓ - ↓	
28	Texture on GWB Walls/Ceiling			
EH-28A			Floor 2 - Laundry Room - W Wall	
EH-28B			Floor 3 - ↓ - ↓	
29	Mastic Assoc. w/ 1/4" Beige Covebase			
EH-29A			Floor 2 - Unit 211 - Bathroom - SW Corner	

Relinquished By: John McCaslin Signature: [Signature] Date/Time: 2/15/2013 1730

Received By: Signature: Date/Time:

Relinquished By: Signature: Date/Time:

Received By: RAZ MANSOURI Signature: [Signature] Date/Time: 2/19/13



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ACM BULK SAMPLE DATA SHEET

* PLM Analysis

Stop Analysis at First Positive PAGE 6 OF 8

____ Analyze All Samples

Point Count Analysis (400-point)

Project Name/Address: 120 West Sunset Way Issaquah, WA.

Samples Submitted 76

RGA Project #: KCHA32114

Sampled By: [Signature]

Sample Date: 2/15/2013

Sample(s) Sent To: RGA EMSL Other: _____ TAT: Rush 24Hrs 48Hrs 3-5 Days

*** **FAX OR E-MAIL REPORT TO: SEE ABOVE PROJECT MANAGER (PM)** ***

*** **ADDITIONAL REPORT RECIPIENT(S):** Angela ***

HM#	Material Description:	Sample Location & Material Location	Quantity:
30	Red Grey Tile Pattern VFS w/ Mastic over Pebble Pattern		VFS w/ Mastic
Sample ID			
EH-30A		Unit 211 - Bathroom - SW Corner	
EH-31	Green White w/ Joint Compound		
Sample ID			
EH-31A		Unit 211 - Bedroom Closet - SE Corner	
EH-31B		Unit 213 - ↓ - NE Corner	
EH-32	Texture on Green White Walls / Ceilings		
Sample ID			
EH-32A		Unit 211 - Bedroom Closet - W Wall	
EH-32B		Unit 213 - ↓ - NE Corner	
EH-33	Green Sink Undercoat w/ Gasket + Putty		
Sample ID			
EH-33A		Unit 211 - Kitchen - S Side - Sink	
EH-34	Mastic Assoc. w/ 4" Olive Green Covebase		
Sample ID			
EH-34A		Unit 213 - Bathroom - SE corner	
EH-34B		Unit 211 - ↓ - SW Corner	
EH-35	Green Mosaic Pattern VFS w/ Mastic		
Sample ID			
EH-35A		Unit 213 - Bathroom - SE Corner	
EH-35B		Unit 311 - ↓ - SW Corner	

Relinquished By: [Signature] Signature: [Signature] Date/Time: 2/15/2013 1730
 Received By: _____ Signature: _____ Date/Time: _____
 Relinquished By: _____ Signature: _____ Date/Time: _____
 Received By: RAL MANSURO Signature: [Signature] Date/Time: 2/19/13



X PM - Angela Harkins
angela.harkins@rgaenv.com
fax: 206-281-8922

Sr. PM-E.Hartman
eric.hartman@rgaenv.com
fax: 206.281.8922

RGA CLIENT: King County Housing Authority

ACM BULK SAMPLE DATA SHEET

* PLM Analysis

X Stop Analysis at First Positive PAGE 7 OF 8

Analyze All Samples

Point Count Analysis (400-point)

Project Name/Address: 120 West Sunset Way Issaquah, WA. Samples Submitted 76

RGA Project #: KCHA32114 Sampled By: [Signature] Sample Date: 2/15/2013

Sample(s) Sent To: X RGA EMSL Other: TAT: Rush 24Hrs 48Hrs X 3-5 Days

FAX OR E-MAIL REPORT TO: SEE ABOVE PROJECT MANAGER (PM)
ADDITIONAL REPORT RECIPIENT(S): Angela

HM#	Material Description:	Sample Location & Material Location	Quantity:
36	Black Sink Undercoat w/ Gasket + Putty	Unit 313 - Kitchen - S Side - Sink	
EH-36A			
37	GW B w/ Joint Compound	Unit 313 - Bedroom Closet - NE Corner	
EH-37A			
EH-37B		Unit 311 - ↓ - ↓	
38	Texture on GW B walls/ceilings	Unit 313 - Bedroom Closet - NE Corner N Wall	
EH-38A			
EH-38B		Unit 311 - ↓ - ↓	
39	Mastic Assoc. w/ 4" Tan Covebase	Unit 313 - Bathroom - SE Corner	
EH-39A			
40	Beige/Gray Tile Pattern VFS over PU/mastic over Pebble	Unit 313 - Bathroom - SE Corner	Quantity: VFS w/mastic
EH-40A			
41	Black Sink Undercoat w/ Gasket + Putty	Unit 313 - Kitchen - S Side - Sink	
EH-41A			
EH-41B		Unit 311 - ↓ ↓ ↓	

Relinquished By: John McCaslin Signature: [Signature] Date/Time: 2/15/2013 1730
 Received By: Signature: Date/Time:
 Relinquished By: Signature: Date/Time:
 Received By: DAR MANSURD Signature: [Signature] Date/Time: 2/19/13



RGA
ENVIRONMENTAL
X PM - Angela Harkins
angela.harkins@rgaenv.com
fax: 206-281-8922

Sr. PM-E. Hartman
eric.hartman@rgaenv.com
fax: 206.281.8922

RGA CLIENT: King County Housing Authority

ACM BULK SAMPLE DATA SHEET

* PLM Analysis

X Stop Analysis at First Positive PAGE 8 OF

Analyze All Samples

Point Count Analysis (400-point)

Project Name/Address: 120 West Sunset Way Issaquah, WA. Samples Submitted 76

RGA Project #: KCHA32114 Sampled By: *[Signature]* Sample Date: 2/15/2013

Sample(s) Sent To: X RGA EMSL Other: TAT: Rush 24Hrs 48Hrs X 3-5 Days

*****FAX OR E-MAIL REPORT TO: SEE ABOVE PROJECT MANAGER (PM)*****

*****ADDITIONAL REPORT RECIPIENT(S): Angela*****

HM#	Material Description:	Quantity:
42	Blue Wallpaper on GWB	
Sample ID	Sample Location & Material Location	Quantity:
EH-42A	Floor 3 - E Hallway - E End	

Relinquished By: *[Signature]* Signature: *[Signature]* Date/Time: 2/15/2013 1730

Received By: Signature: Date/Time:

Relinquished By: Signature: Date/Time:

Received By: RAZ MANSURQ Signature: *[Signature]* Date/Time: 2/19/13

Sample Log Chain of Custody

INTERNAL

Client: _____ Client Contact _____
 Company: King County Housing Authority
 Client Address: 15455 65th Ave S
 Seattle WA 98188-2583
 City State Zip
 Phone #: (206)244-7750
 2nd or Cell #: _____
 Fax #: (206)242-0733
 e-mail Address: _____

RGA Batch #: 13-0423
 RGA Project #: KCHA32114
 Client Job #: _____
 Number of Samples: 76

TYPE OF ANALYSIS		
ASBESTOS:	METALS: _____	
____ PCM (air)	____ Paint	____ Soil
<u>X</u> PLM (bulk)	____ Wipe	____ Air
____ Pt. Count (bulk)	____ TCLP	____ Water
MOLD: P&K <u> </u> 100 <u> </u> 101 <u> </u> 102 <u> </u> 105 <u> </u> 117		
Other Method: _____		

Project Manager: Angela Harkins

Project Location: <u>120 West Sunset Way</u>
<u>Issaquah, WA</u>

Turn Around Time (other): <u>5 day</u>		
2 hour / 4 hour	Same Day	One Day
Two Day	3-5 days	10 days
Price per Sample: \$ _____		

Condition: X Good _____ Damaged _____ Severe Damage

#	Client Sample ID	RGA Laboratory ID	Comments	#	Client Sample ID	RGA Laboratory ID	Comments
1	EH-01A	13004153		11	EH-05A	13004163	
2	EH-01B	13004154		12	EH-05B	13004164	
3	EH-01C	13004155		13	EH-05C	13004165	Hold
4	EH-02A	13004156		14	EH-06A	13004166	
5	EH-02B	13004157		15	EH-06B	13004167	
6	EH-02C	13004158		16	EH-07A	13004168	
7	EH-03A	13004159		17	EH-07B	13004169	
8	EH-04A	13004160		18	EH-08A	13004170	Hold
9	EH-04B	13004161	Hold	19	EH-08B	13004171	
10	EH-04C	13004162		20	EH-08C	13004172	

	Signature	Date	Time
Sampled by:	<u>JOHN McCASLIN / RUSSELL BROWN</u>	<u>2/15/13</u>	
Relinquished by:			
Received by:			
Relinquished by:	<u>[Signature]</u>	<u>2/18/13</u>	<u>945</u>
Received for Laboratory by:	<u>[Signature]</u>	<u>022713</u>	<u>1545</u>
Analyzed by:			
Preliminary Results Reported to P.M. by:			
Final Report to P.M. by:			

Special Instructions: Stop analysis at first positive.
 Due by 2/26/2013

Sample Log Chain of Custody

INTERNAL

Client: Client Contact
 Company: King County Housing Authority
 Client Address: 15455 65th Ave S
 Seattle WA 98188-2583
 City State Zip

RGA Batch #: 13-0423
 RGA Project #: KCHA32114
 Client Job #: _____
 Number of Samples: 76

Page: 2 of 3

#	Client Sample ID	RGA Laboratory ID	Comments	#	Client Sample ID	RGA Laboratory ID	Comments
21	EH-09A	13004173		41	EH-21A	13004193	
22	EH-10A	13004174		42	EH-21B	13004194	
23	EH-10B	13004175	Hold	43	EH-22A	13004195	
24	EH-10C	13004176		44	EH-22B	13004196	
25	EH-11A	13004177		45	EH-23A	13004197	
26	EH-11B	13004178		46	EH-23B	13004198	
27	EH-12A	13004179		47	EH-24A	13004199	
28	EH-13A	13004180		48	EH-24B	13004200	
29	EH-14A	13004181		49	EH-25A	13004201	
30	EH-15A	13004182		50	EH-25B	13004202	
31	EH-16A	13004183		51	EH-26A	13004203	
32	EH-16B	13004184		52	EH-27A	13004204	
33	EH-16C	13004185	Hold	53	EH-27B	13004205	
34	EH-17A	13004186		54	EH-28A	13004206	
35	EH-17B	13004187	Hold	55	EH-28B	13004207	
36	EH-17C	13004188		56	EH-29A	13004208	
37	EH-18A	13004189		57	EH-30A	13004209	
38	EH-19A	13004190		58	EH-31A	13004210	
39	EH-19B	13004191		59	EH-31B	13004211	
40	EH-20A	13004192		60	EH-32A	13004212	

	Signature	Date	Time
Sampled by:	<i>SOPHIE MCCALIN/RUSSELL BROWNE</i>	<i>2/15/13</i>	
Relinquished by:			
Received by:			
Relinquished by:	<i>[Signature]</i>	<i>2/19/13</i>	<i>9:45</i>
Received for Laboratory by:	<i>[Signature]</i>	<i>022713</i>	<i>1545</i>
Analyzed by:			
Preliminary Results Reported to P.M. by:			
Final Report to P.M. by:			

Special Instructions: Stop analysis at first positive.
 Due by 2/26/2013

RGA Laboratory Services

Sample Log Chain of Custody

INTERNAL

Client: Client Contact
 Company: King County Housing Authority
 Client Address: 15455 65th Ave S
 Seattle WA 98188-2583
 City State Zip

RGA Batch #: 13-0423
 RGA Project #: KCHA32114
 Client Job #: _____
 Number of Samples: 76

Page: 3 of 3

#	Client Sample ID	RGA Laboratory ID	Comments	#	Client Sample ID	RGA Laboratory ID	Comments
61	EH-32B	13004213		81			
62	EH-33A	13004214		82			
63	EH-34A	13004215		83			
64	EH-34B	13004216		84			
65	EH-35A	13004217		85			
66	EH-35B	13004218		86			
67	EH-36A	13004219		87			
68	EH-37A	13004220		88			
69	EH-37B	13004221		89			
70	EH-38A	13004222		90			
71	EH-38B	13004223		91			
72	EH-39A	13004224		92			
73	EH-40A	13004225		93			
74	EH-41A	13004226		94			
75	EH-41B	13004227		95			
76	EH-42A	13004228		96			
77				97			
78				98			
79				99			
80				100			

	Signature	Date	Time
Sampled by:	JOHN MCCASLIN/RUSSELL BROWNE	2/15/13	
Relinquished by:			
Received by:			
Relinquished by:			
Received for Laboratory by:		2/19/13	945
Analyzed by:		022213	1545
Preliminary Results Reported to P.M. by:			
Final Report to P.M. by:			

Special Instructions: Stop analysis at first positive.
 Due by 2/26/2013



Attachment 2

RGA Technician Field Notes



PROJECT NAME: _____

RGA PROJECT #: KCHA DATE: _____

RGA REPRESENTATIVE: _____

DESCRIPTION: _____

WWW.RGAENV.COM

NOTES: _____

East Ridge ~~Apartment~~ (King Co Housing Auth)

ACM + Pb by XRF

3 story bldg - 40 units (2 units per floor - 6 units total)

Full plumbing removal + replacement

- Kitchens/Baths/Bedroom Closets

- Walls/Floors/plumbing/woul

- Common areas w/plumbing access

- Ext. Siding components

Ext Samples -

2 GWB Ea unit (Bath/Closet) = 12

1 GWB Ea Hallway = 3

2 Flooring ea unit = 12

2 CB ea unit = 12

45

? 1 Flooring ea hallway @ riser pen. = 3

1 CB ea Hallway = 3

2 ea. Siding = 2

1 ea unit / hall - Text = 7

9

Pipe woul? (10 ea) = 10

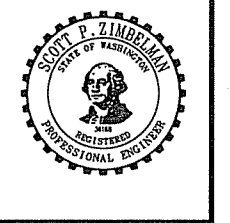
10



Attachment 3

ACM Materials Sample Location Drawing

bce engineers, inc.
 p: (253) 922-0446
 f: (253) 922-0896
 6021 12th street east, suite 200, tacoma, wa 98424



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KCHA
 EASTRIDGE HOUSE
 PLUMBING REPLACEMENT
 ISSAQUAH, WA

FIRST FLOOR
 PLUMBING PLAN

DRAWN BY: CB
 CHECKED BY: SZ
 REVISIONS:

DRAWING No.
M3.1
 DATE: 1-10-12
 CHECK SET
 PROJECT No. 212-223

Assumed Mats - Mens RR - 4" Beige CWT w/grout + mortar
 - Garbage Room - White FRP on Walls (to ~ 4')
 - Unit 111 - Bathroom - CWT @ Bath (~ 10")
 - Unit 113 - Bathroom - Mosaic @ Shower surround (~ 80")

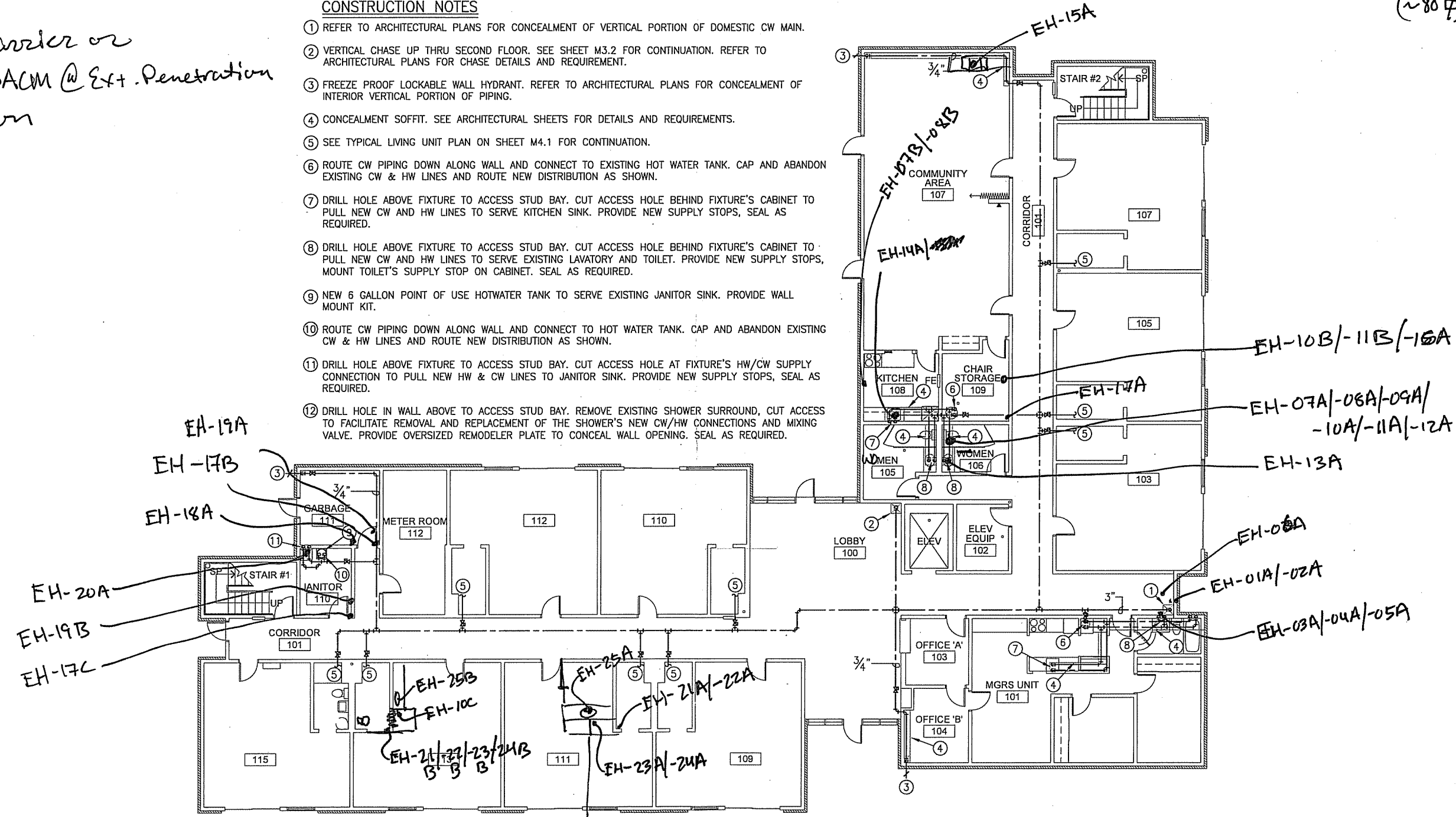
Unit 111 - Bath + Kitchen have same VFS + Lovebase
 * No Vapor barrier or other SACM @ Ext. Penetration location

GENERAL NOTES

1. PIPING OFFSET FOR CLARITY. ROUTE SHOWN IS IDEAL. ADDITIONAL OFFSETS AND FITTINGS MAY BE REQUIRED DUE TO EXISTING SYSTEMS.
2. CW MAINS IN CORRIDORS SHALL BE COPPER AND SUSPENDED FROM STRUCTURE ABOVE DROPPED CEILING. LIVING UNIT'S SUPPLY BRANCHES SHALL BE PEX PIPING.

CONSTRUCTION NOTES

- 1 REFER TO ARCHITECTURAL PLANS FOR CONCEALMENT OF VERTICAL PORTION OF DOMESTIC CW MAIN.
- 2 VERTICAL CHASE UP THRU SECOND FLOOR. SEE SHEET M3.2 FOR CONTINUATION. REFER TO ARCHITECTURAL PLANS FOR CHASE DETAILS AND REQUIREMENT.
- 3 FREEZE PROOF LOCKABLE WALL HYDRANT. REFER TO ARCHITECTURAL PLANS FOR CONCEALMENT OF INTERIOR VERTICAL PORTION OF PIPING.
- 4 CONCEALMENT SOFFIT. SEE ARCHITECTURAL SHEETS FOR DETAILS AND REQUIREMENTS.
- 5 SEE TYPICAL LIVING UNIT PLAN ON SHEET M4.1 FOR CONTINUATION.
- 6 ROUTE CW PIPING DOWN ALONG WALL AND CONNECT TO EXISTING HOT WATER TANK. CAP AND ABANDON EXISTING CW & HW LINES AND ROUTE NEW DISTRIBUTION AS SHOWN.
- 7 DRILL HOLE ABOVE FIXTURE TO ACCESS STUD BAY. CUT ACCESS HOLE BEHIND FIXTURE'S CABINET TO PULL NEW CW AND HW LINES TO SERVE KITCHEN SINK. PROVIDE NEW SUPPLY STOPS, SEAL AS REQUIRED.
- 8 DRILL HOLE ABOVE FIXTURE TO ACCESS STUD BAY. CUT ACCESS HOLE BEHIND FIXTURE'S CABINET TO PULL NEW CW AND HW LINES TO SERVE EXISTING LAVATORY AND TOILET. PROVIDE NEW SUPPLY STOPS, MOUNT TOILET'S SUPPLY STOP ON CABINET. SEAL AS REQUIRED.
- 9 NEW 6 GALLON POINT OF USE HOTWATER TANK TO SERVE EXISTING JANITOR SINK. PROVIDE WALL MOUNT KIT.
- 10 ROUTE CW PIPING DOWN ALONG WALL AND CONNECT TO HOT WATER TANK. CAP AND ABANDON EXISTING CW & HW LINES AND ROUTE NEW DISTRIBUTION AS SHOWN.
- 11 DRILL HOLE ABOVE FIXTURE TO ACCESS STUD BAY. CUT ACCESS HOLE AT FIXTURE'S HW/CW SUPPLY CONNECTION TO PULL NEW HW & CW LINES TO JANITOR SINK. PROVIDE NEW SUPPLY STOPS, SEAL AS REQUIRED.
- 12 DRILL HOLE IN WALL ABOVE TO ACCESS STUD BAY. REMOVE EXISTING SHOWER SURROUND, CUT ACCESS TO FACILITATE REMOVAL AND REPLACEMENT OF THE SHOWER'S NEW CW/HW CONNECTIONS AND MIXING VALVE. PROVIDE OVERSIZED REMODELER PLATE TO CONCEAL WALL OPENING. SEAL AS REQUIRED.



1 FIRST FLOOR PLUMBING PLAN
 SCALE: 1/8"=1'-0"



* All matls. in Women's RR same as Men's RR
 * Texture on GarB Uniform thru common areas + hallways

Tan Covebase w/ Brown Mastic (Same as FL1 Common areas)
in common areas on this floor

Janitor Closet - Same gasket as FL1 Jan. Clos.

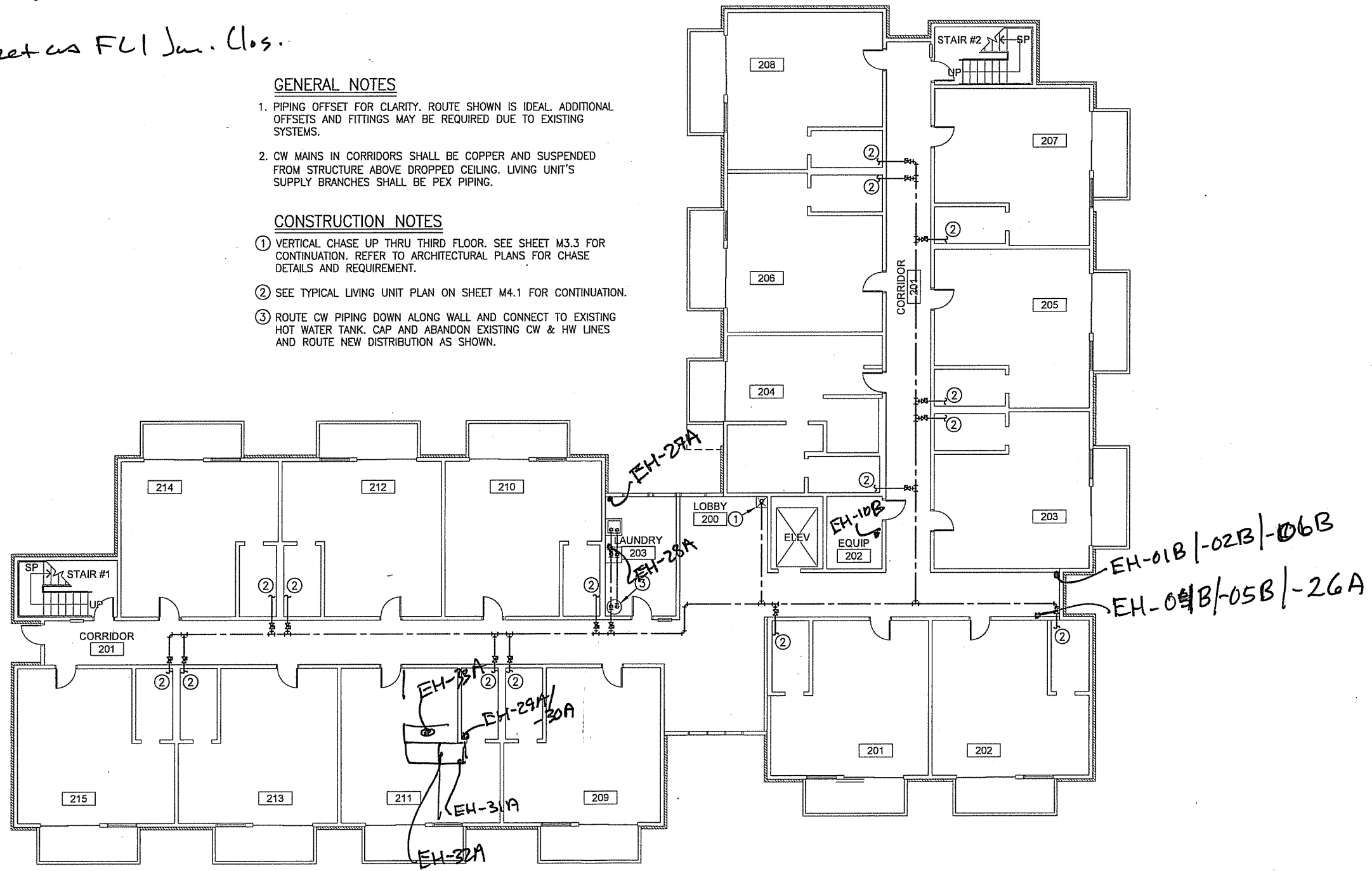
Stel Bathrooms ~ 6' X 12'

GENERAL NOTES

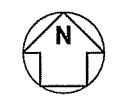
1. PIPING OFFSET FOR CLARITY. ROUTE SHOWN IS IDEAL. ADDITIONAL OFFSETS AND FITTINGS MAY BE REQUIRED DUE TO EXISTING SYSTEMS.
2. CW MAINS IN CORRIDORS SHALL BE COPPER AND SUSPENDED FROM STRUCTURE ABOVE DROPPED CEILING. LIVING UNIT'S SUPPLY BRANCHES SHALL BE PEX PIPING.

CONSTRUCTION NOTES

- ① VERTICAL CHASE UP THRU THIRD FLOOR. SEE SHEET M3.3 FOR CONTINUATION. REFER TO ARCHITECTURAL PLANS FOR CHASE DETAILS AND REQUIREMENT.
- ② SEE TYPICAL LIVING UNIT PLAN ON SHEET M4.1 FOR CONTINUATION.
- ③ ROUTE CW PIPING DOWN ALONG WALL AND CONNECT TO EXISTING HOT WATER TANK. CAP AND ABANDON EXISTING CW & HW LINES AND ROUTE NEW DISTRIBUTION AS SHOWN.



② SECOND FLOOR PLUMBING PLAN
SCALE: 1/8"=1'-0"



bce engineers, inc.
p: (253) 922-0446
f: (253) 922-0896
6021 12th street east, suite 200, tacoma, wa 98424

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KCHA
EASTRIDGE HOUSE
PLUMBING REPLACEMENT
ISSAQUAH, WA

SECOND FLOOR
PLUMBING PLAN

DRAWN BY:	CB
CHECKED BY:	SZ
REVISIONS:	

DRAWING No.
M3.2
DATE: 1-10-12
CHECK SET
PROJECT No. 212-223

Unit 311 - Same VFT + CB as Unit 213

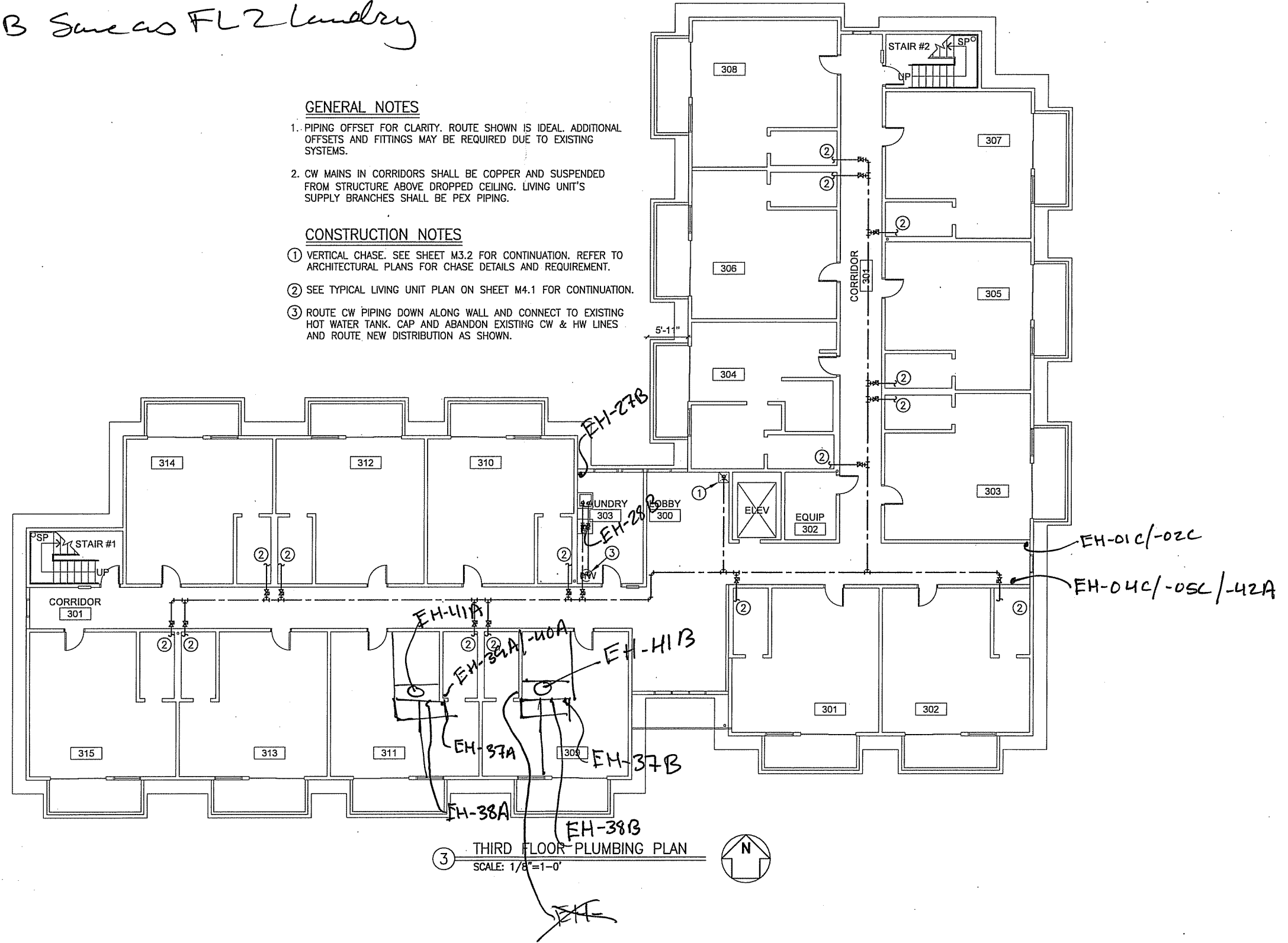
Laundry Room Vinyl + CB Same as FL 2 Laundry

GENERAL NOTES

1. PIPING OFFSET FOR CLARITY. ROUTE SHOWN IS IDEAL. ADDITIONAL OFFSETS AND FITTINGS MAY BE REQUIRED DUE TO EXISTING SYSTEMS.
2. CW MAINS IN CORRIDORS SHALL BE COPPER AND SUSPENDED FROM STRUCTURE ABOVE DROPPED CEILING. LIVING UNIT'S SUPPLY BRANCHES SHALL BE PEX PIPING.

CONSTRUCTION NOTES

- ① VERTICAL CHASE. SEE SHEET M3.2 FOR CONTINUATION. REFER TO ARCHITECTURAL PLANS FOR CHASE DETAILS AND REQUIREMENT.
- ② SEE TYPICAL LIVING UNIT PLAN ON SHEET M4.1 FOR CONTINUATION.
- ③ ROUTE CW PIPING DOWN ALONG WALL AND CONNECT TO EXISTING HOT WATER TANK. CAP AND ABANDON EXISTING CW & HW LINES AND ROUTE NEW DISTRIBUTION AS SHOWN.



③ THIRD FLOOR PLUMBING PLAN
SCALE: 1/8"=1'-0"

bce engineers, inc.
p: (253) 922-0446
f: (253) 922-0896
6021 12th street east, suite 200, tacoma, wa 98424

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KCHA
EASTRIDGE HOUSE
PLUMBING REPLACEMENT
ISSAQUAH, WA

THIRD FLOOR
PLUMBING PLAN

DRAWN BY: CB
CHECKED BY: SZ
REVISIONS:

DRAWING No.
M3.3
DATE: 1-10-12
CHECK SET
PROJECT No. 212-223



Attachment 4

RGA Certifications

Certificate of Completion
This is to certify that
Angela Harkins
has satisfactorily completed
8 hours of refresher training as an
AHERA Project Designer
in compliance with TSCA Title II AHERA 40 CFR Part 763
U.S. EPA Region 10 Accreditation #792


Course Date: 05/07/2012 Cert.# 12-0906
Refresher required by: 5/7/2013


 **RGA**
ENVIRONMENTAL 1730 Minor Ave Suite 900
Seattle, WA 98101 • 888.281.8858
www.rgatraining.com

8 hours of refresher training as an
AHERA Project Designer

Angela Harkins
Cert.# 12-0906
Course Date: 05/07/2012
Refresher required by: 5/7/2013

Instructor: Ethel Kaufman Training Manager: Wendy Newell
RGA Training: 206.269.6313
RGA Laboratory: 206.956.3775
RGA Consulting: 206.269.6302
Corporate Office: 510.547.7771



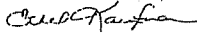
 **RGA** 1730 Minor Ave Suite 900, Seattle, WA 98101
ENVIRONMENTAL 888.281.8858 • www.rgatraining.com

**4 hours of refresher training as an
AHERA Building Inspector**


David L. Welch
Cert.# 12-1164

Course Date: 06/25/2012
Refresher required by: 6/25/2013

Instructor: Ethel Kaufman



Training Manager: Wendy Newell
RGA Training: 206.269.6313
RGA Laboratory: 206.956.3775
RGA Consulting: 206.269.6302
Corporate Office: 510.547.7771

 **1730 Minor Ave Suite 900, Seattle, WA 98101**
888.281.8858 • www.rgatraining.com

Certificate of Completion

This is to certify that

David L. Welch
has satisfactorily completed

**4 hours of refresher training as an
AHERA Building Inspector**

in compliance with TSCA Title II AHERA 40 CFR Part 763
U.S. EPA Region 10 Accreditation #792

Course Date: 06/25/2012

Cert.# 12-1164

Refresher required by: 6/25/2013

 **ENVIRONMENTAL**

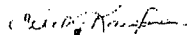
1730 Minor Ave Suite 900
Seattle, WA 98101 • 888.281.8858
www.rgatraining.com

**8 hours of refresher training as an
AHERA Project Designer**


David L. Welch
Cert.# 12-2319

Course Date: 11/19/2012
Refresher required by: 11/19/2013

Instructor: Ethel Kaufman



Training Manager: Wendy Newell
RGA Training: 206.269.6313
RGA Laboratory: 206.956.3775
RGA Consulting: 206.269.6302
Corporate Office: 510.547.7771

 **1730 Minor Ave Suite 900, Seattle, WA 98101**
888.281.8858 • www.rgatraining.com

Certificate of Completion

This is to certify that

David L. Welch
has satisfactorily completed

**8 hours of refresher training as an
AHERA Project Designer**

in compliance with TSCA Title II AHERA 40 CFR Part 763
U.S. EPA Region 10 Accreditation #792

Course Date: 11/19/2012

Cert.# 12-2319

Refresher required by: 11/19/2013

 **ENVIRONMENTAL**

1730 Minor Ave Suite 900
Seattle, WA 98101 • 888.281.8858
www.rgatraining.com

Certificate of Completion
This is to certify that
John McCaslin
has satisfactorily completed
4 hours of refresher training as an
AHERA Building Inspector
in compliance with TSCA Title II AHERA 40 CFR Part 763
U.S. EPA Region 10 Accreditation #792


Course Date: 05/10/2012 Cert.# 12-0923
Refresher required by: 5/10/2013


 **RGA**
ENVIRONMENTAL 1730 Minor Ave Suite 900
Seattle, WA 98101 • 888.281.8858
www.rgatraining.com

4 hours of refresher training as an
AHERA Building Inspector

John McCaslin
Cert.# 12-0923
Course Date: 05/10/2012
Refresher required by: 5/10/2013

Instructor: Ethel Kaufman Training Manager: Wendy Newell
RGA Training: 206.269.6313
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Eastridge House Apartments

Overview

The Eastridge House apartment building located at 120 West Sunset Way, Issaquah, WA 98027 is a three (3) story apartment building with an R2 occupancy. There are 39 one (1) bedroom one (1) bathroom units, 1 two (2) Bedroom one (1) Bathroom unit, with three (3) one (1) bedroom one (1) bathroom accessible units (#110,112,113) on the first floor.

This building has a fire alarm system which needs to be upgraded. We believe the building is required to have an upgraded Fire Alarm System to meet section 907.2.9 of the current 2018 IBC with amendments per the city of Issaquah Municipal Code section 16.06.125 and 2016 NFPA 72.

The fire alarm code requirements for a R2 occupancy dwelling units are difficult to navigate and frequently executed in various ways.

The common areas of an R2 occupancy are clearly stated in the referenced codes. The challenge comes when we come to applying the code to the dwelling units.

Quick vocabulary refresher:

A smoke detector is a device connected to a system panel where the panel communicates with the smoke detector and activates notification appliance circuits accordingly. Clearing the alarm condition requires human intervention to verify the smoke is clear and reset the control panel.

A smoke alarm or (SMSA) is an all-inclusive stand-alone device connected to 120vac power called Single- and Multiple-Station "Alarms". When activated it will produce a temporal three sound. When the smoke has cleared, the alarm is deactivated.

A low frequency sounder is a notification device for the purpose of waking a sleeping person. These are connected to a fire alarm system notification appliance circuit and when activated produce a 520hz tone.

Everyone knows the requirement for smoke *alarms* in each bedroom and the addition of visual devices if the unit is an accessible type unit. Fewer know the requirement for visual coverage is only for Moderately Severe to Profound Hearing Loss tenants and that for Mild to Severe Hearing Loss the smoke alarm shall produce a low frequency sound if a hearing-impaired person occupies the apartment. In 2013 a requirement for low frequency sounders was introduced into the code. These devices are to be installed in all sleeping areas (including the living room). This introduced a new challenge.

Imagine the smoke *alarm* in a tenant unit is activated due to smoke and sets off the standard temporal 3 tones. Then a tenant notices the fire and activates a manual pull station, which activates the building fire alarm system, which in turn activates the low frequency sounders. Now, potentially within all the non-accessible units you have two conflicting sounds. This can be disorienting to a person woken from sleep.

Below is the current code as it applied today. The only difference between the below referenced code and BCE's recommendations will be to meet IBC section 907.2.10 by installing combination smoke/CO *detectors* with sounder bases. These devices can be made to act like single- and multiple-station *alarms* within a unit. If one is activated, then all within that unit only are activated. If the smoke is cleared, the *detectors* within that unit are deactivated. This will need to show a supervisory indication at the main fire alarm panel and it need to notify the off-site monitoring company of the condition. No action needs to take place, just automatic recording. Only when two or more dwelling units are activated will these dwelling unit *detectors* activate the building alarm system.

**Current 2018 IBC & 2016 NFPA 72 Fire Alarm Code Requirements**City of Issaquah Municipal code

- Section 907.1 (1-5) of the City of Issaquah municipal code states that the entire fire alarm system in existing buildings shall comply with all requirements of sections 907.2 for new buildings or structures as well as 907.9 when a fire alarm control panel is replaced in an existing structure. Fire alarm system upgrades do not require upgrades to other building system unless necessary to meet the requirements of 907.2
- Section 907.5.2.1.1 of the City of Issaquah municipal code states that minimum sound pressure level in all Group R occupancies shall be 75 dBA in all spaces.
- Section 907.6.4 of the City of Issaquah municipal code requires each floor to be zoned separately and a zone shall not exceed 22,500 square feet. Each zone shall not exceed 300 feet in length.
- Section 907.6.6.3 of the City of Issaquah municipal code states that POTS lines are not permitted for new monitoring.

International Building Code (IBC)

- Section 907.2 of the IBC states that new buildings and structures shall be equipped with an approved fire alarm system installed in accordance with NFPA 72 and sections 907.2.9, 907.2.10, and provide occupant notification in accordance with section 907.5.
- Section 907.2.9 of the IBC states a Fire alarm system and smoke *alarms* shall be installed in Group R-2 occupancies if any of the following conditions apply:
 1. Any dwelling unit or sleeping unit is located three or more stories above the lowest level of exit discharge.
 2. Any dwelling unit or sleeping unit is located more than one story below the highest level of exit discharge of exits serving the dwelling unit or sleeping unit.
 3. The building contains more than 16 dwelling units or sleeping units.

This building meets all three of the conditions above. This building also meets the requirements of exception #2 which states that manual pull stations are not required if the building is fully sprinklered.

IBC Section 907.2.10 states that listed single- and multiple-station *alarms* shall be installed on the ceiling outside of each separate sleeping area in the immediate vicinity of the bedrooms and in each room used for sleeping purposes.

IBC Section 907.5 states occupant notification is required. The specific requirements for type, placement, etc. are addressed in NFPA 72 under section 18.4 and section 18.5. The common areas and corridors are addressed under 18.4.4, 18.5.5.5, and 18.5.5.6 with standard audible coverage of 15db above ambient or 70db throughout with visual coverage 15' from the end of corridors, dining areas, community rooms, laundry rooms, restrooms, library, and community outdoor decks.

IBC Section 907.5.2.3.3 states the requirement to have the "future capability" to support the addition of visible alarm notification appliances into a system easily if a hearing-impaired person moved into a non-accessible unit. This can involve one of the following:

1. The interconnection of the building fire alarm system with the unit smoke *alarms*.
2. The replacement of audible appliances with combination audible/visible appliances.
3. The future extension of the existing wiring from the unit smoke *alarm* locations to required locations for visible appliances.

**Fire Alarm System Code Analysis**

BCE Job #: 221-257

Job Name: KCHA- Eastridge House Apartments

If a fire alarm system is installed per the current 2018 IBC code there would be low frequency sounders in each sleeping area that activate when the main fire alarm system is activated by manual pull stations, sprinkler waterflow, or common area smoke *detectors*. Separately there would be a single- and multiple-station *alarm* (SMSA) installed in each sleeping area that activates all SMSA within the unit on the presence of smoke and automatically deactivates if the smoke is cleared.

These SMSA are not required to be connected to the fire alarm system. However, 907.5.2.3.3 above attempts to make it an easy transition to add the necessary connections if a tenant with hearing loss moves into a non-accessible unit.

Section 29.5.10 of NFPA 72 puts the responsibility on the hearing-impaired person to notify KCHA of their hearing loss. Once a tenant notifies KCHA that they have hearing loss, KCHA must follow NFPA section 29.5.10 (1)(2) depending on the level of hearing loss of the tenant.

Section 29.5.10.1 of NFPA 72 states that if a “Mild to Severe Hearing Loss” tenant moves into a non-accessible unit that low frequency sounders shall be provided upon the activation of a smoke *alarm*.

Currently there are no smoke *alarms* on the market that produce a low frequency sound. To meet section 29.5.10.1 the smoke *alarm* would need to have an onboard relay to activate the building fire alarm system. Some SMSA devices have onboard relays but they must be ordered this way. The other way to accomplish this would be to remove the 120vac SMSA and install a system smoke *detector* with a sounder base that produces a low frequency sound.

Section 29.5.10.2 of NFPA 72 states that if a “Moderately Severe to Profound Hearing Loss” tenant moves into a non-accessible unit that visual notification per section 18.5.5.8 is required.

To meet section 29.5.10.2 the smoke *alarm* would need to change in the same way as described in 29.5.10.1 above and visual notification would need to be added in accordance with section 18.5.5.8 of NFPA 72.

Section 18.5.5.8 of NFPA 72 requires the visual coverage to be 177cd intensity if mounted on the wall within 24 inches of the ceiling or mounted on the ceiling. If the strobe is mounted at 24 inches or greater down from the ceiling to the top of the strobe lens or more then the visual coverage is allowed to be 110cd intensity.

Conclusions & Recommendations

BCE recommends that KCHA follow the 2021 International Building Code as it applies to the dwelling unit smoke detection and notification. The Eastridge house currently has multiple-station *alarms* installed in each unit living room and bedroom. These currently need to be upgraded to smoke/*CO alarms*.

Under the 2018 IBC, the requirements for low frequency notification are all currently located in referenced standards (NFPA 72), not directly within the building code. The updated content in the 2021 IBC (expected to be adopted by Washington state in 2023) will now include much of this scoping for low frequency tones directly within the body of Section 907.5.2. While this minor change should simplify finding and understanding these requirements, there was a more impactful change in the body of the 2021 IBC as well: The IBC (2021) will now require low frequency notification to be provided for all residential units upon activation of smoke *detectors* /*alarms* in that unit, where this would have only been required in hearing impaired units under previous editions. This requirement would take precedence over the language and scoping of NFPA 72, in accordance with the Applicability section of 2021 IBC.



Fire Alarm System Code Analysis

BCE Job #: 221-257

Job Name: KCHA- Eastridge House Apartments

This is a significant change as there are limited options on the market to purchase notification appliances capable of producing low frequency tones other than those devices listed to be part of the fire alarm system.

The fire alarm system as recommended by BCE, Engineers, Inc. will meet the 2018 & 2021 International Building Code (IBC), 2016 & 2019 NFPA 72, and the city of Issaquah municipal code 16.06.125. This approach will save money on the elimination of separate low frequency sounders in each sleeping area. This will also make accommodating section 29.5.10 of NFPA 72 much easier when a mild to severe hearing loss tenant occupies a unit. Nothing will need to be done to any units unless a moderately severe to profound hearing loss tenant occupies a non-accessible unit. If following this method, the addition of visual coverage becomes as simple as adding the visual coverage strobe by tapping off of the sounder base notification circuit to a ceiling or wall mount strobe within a few feet of the smoke *detector*.

Since the upcoming code will require single- and multiple-station *alarms* to produce a low frequency sound in all dwelling units is estimated to be adopted by Washington state in July 2023 and there are no single- and multiple-station *alarms* currently on the market that produce a low frequency sound, BCE believes this is a forward thinking, cost saving, and lifesaving change that should be made if/when upgrading the fire alarm system.

Please feel free to call if you wish to discuss this analysis in more depth.

Sincerely,

Tim Eastman

Senior Engineering Technician

BCE Engineers, Inc.

P 253.922.0446 | W bceengineers.com



Fire Alarm Site Assessment

Project Name:	Eastridge House	Client:	KCHA
BCE Project No.:	221-257	Address:	120 W. Sunset Way, Issaquah, WA 98027
Site Visit Date:	12-01-2022	Time:	1:00 PM
Temperature:	38 F	Weather:	Foggy/Overcast
Present At Site:	Michael Cuadra (KCHA)	Present At Site:	KCHA Maint. Staff
Reported By:	Tim Eastman (BCE)	Present At Site:	Tim Eastman (BCE)

Overview – Eastridge House Apartments – King County Parcel # 2824069105

Eastridge House is 3 story apartment building with an R2 occupancy. This building has 40 dwelling units. There is one (1) two-bedroom one bath and 39 one (1) bedroom one (1) bathroom units with three (3) one (1) bedroom one (1) bathroom units accessible units (#110,112,113) on the first floor.

The current fire alarm system main control panel is a Silent Knight SK-5820xl located in the Office A #103 off the main lobby.



Main Fire Alarm Control



Manual Pull



Common Area & Tenant Horn/Strobe



Tenant Smoke/Strobe (SMSA)



Tenant Smoke/Heat (SMSA)



Fire Alarm Site Assessment

Description of Current Fire Alarm System Coverage

System smoke detectors are installed in the common corridors, electrical room, and elevator machine room.

Stand-alone 120vac multiple-station smoke *alarms* with strobes are in each tenant unit living room and bedroom.

Notification consists of Gentex horn/strobes in the common areas with Gentex horn/strobes in each tenant unit living room and bedroom.

The sprinkler system consists of one (1) wet system protecting the interior spaces with sectional floor control valves on the 1st, 2nd, and 3rd floors.

Site Visit Observations and Conversations

The current 5000 series silent knight is discontinued and no longer manufactured or supported. While the current 5820xl is a great fire alarm panel and still functioning, it is over 20-year-old technology. If upgrading the fire alarm system, this panel should be replaced. As of April 2018, the Honeywell Silent Knight 6000 series is the new line of fire alarm control panels.

There was discussion regarding whether the Issaquah fire department (Eastside Fire and Rescue) and/or the city of Issaquah is requiring the fire alarm system to be upgraded. From our site observations, we believe this is to meet the requirements of low frequency sounders in all sleeping areas.

There is an elevator modernization that is planned. This is confirmed to be in the permitting phase. When looking up the permit for this project, this permit is in review with the city of Issaquah as of August 12, 2021. Mybuildingpermit.com does not show an issued date or a finalized date.

Current Fire Alarm System Operation

From our visual inspection of the system, it appears that the current system operates in the following way:

The activation of any common area smoke detector, manual pull station, or waterflow device activates all notification in the building. (Common area Audible coverage and tenant horn/strobes)

Phase I & II Elevator recall - The activation of the 1st floor elevator lobby smoke detector recalls the elevator to the 2nd floor. The activation of the 2nd or 3rd floor elevator lobby smoke detector recalls the elevator to the 1st floor. The activation of the elevator machine room recalls the elevator to the 2nd floor and activate the fireman's HAT light function within the elevator.

The activation of any tenant smoke alarm activates the internal temporal 3 sounder all smoke alarms (and strobes in accessible units #110, #112, & #113) within that tenant unit only. It appears these smoke *alarms* are connected to the building fire alarm system. It is unclear whether they activate the building alarm or activate a supervisory signal at the building fire alarm panel.



Fire Alarm Site Assessment

Fire Alarm Upgrade Recommendations

The fire alarm system control panel should be upgraded to the newest Silent Knight 6000 series addressable control panel following the system code requirements (below) and attached fire alarm system code analysis.

Three required services will be needed for this project. A general contractor, a fire alarm contractor, and an electrical contractor.

The general contractor will need to provide project management, building and tenant access coordination, and drywall paint and patching.

The fire alarm contractor will need to provide the detection and notification systems to replace the fire alarm system in its entirety (wire, devices, panels). The old system is to remain in service until the new system is in place, online, and approved by the AHJ. Once approved, the fire alarm contractor will need to demolish the old fire alarm system completely.

The requirements for the new system that shall be met are as listed below under system code requirements.

The electrical contractor will need to install Electrical 120vac equipment and circuits to support new fire alarm upgrade for control panels and equipment. They will also need to remove all single multiple station 120VAC combination smoke alarms in all units once the new fire alarm system has been approved by the local AHJ.

System Code Requirements

The fire alarm system as recommended by BCE, Engineers, Inc. (See attached fire alarm system code analysis for a deeper understanding of the items below.):

- Automatic Smoke Detectors required in all Public Egress Pathways, electrical rooms, elevator machine room, and elevator lobby.
- Automatic Smoke *Detectors* with low frequency sounder bases programmed to function like single- and - multiple station alarms in all dwelling unit sleeping areas (bedroom & living room)
- Monitoring of the existing full sprinkler system.
- Manual Pull Stations are NOT required per section 907.2.9.1 exception 2 of the International Building Code (IBC).
- Graphic Maps (Qty. 2) are required for this project and shall be posted at the fire alarm control panel and all remote annunciator panel locations.
- Remote Annunciators (Qty. 2) shall be installed. One at a pre-approved fire department location and the other in the sprinkler riser room. (If riser room is not the same room as the main fire alarm control panel.)
 - Quantity and location of remote annunciators are subject to location and accessibility of main fire alarm panel. Coordinate with the local AHJ to determine
- Audible/Visual Notification shall be installed throughout the entire building in accordance with sections 907.5.2.1 and 907.5.2.3 of the International Building Code (IBC) and section 18.4 and 18.5 of NFPA 72.
 - Audible/Visual Coverage in building common areas (Dining areas, community rooms, laundry rooms, restrooms, library, community outdoor decks, and interior corridors).
 - All sleeping areas will be equipped with low frequency sounder bases activated by building alarm.
- Audible/Visual Notification shall be installed in accessible tenant units #110, #112, & #113 in accordance with section 907.5.2.1 and 907.5.2.3.3 of the International Building Code (IBC) and section 18.5.5.8 of NFPA 72.



Fire Alarm Site Assessment

- The Fire Alarm System shall also interface with other systems such as Smoke and Fire/Smoke Dampers, Duct Smoke Detectors, H.V.A.C. Systems, Magnetic Door Holders, Magnetic Door Releases, Cooking Hood Fire Suppression Systems, Fire Protection Sprinkler Systems, and Elevators where applicable.
- Provide Central station monitoring via AES radio mesh network. (Plain Old Telephone Service (POTS) lines are not permitted)

Section 16.06.125 of the City of Issaquah municipal code requires the following amendments to the standard international fire code:

- IFC section 907.2 – The replacement of the fire alarm system in this building shall follow the requirements for new buildings.
 - Fire alarm system upgrades shall not require upgrades to other building systems.
- IFC section 907.5.2.1.1 – The minimum sound pressure level shall be 75db in all R2 occupancies.
- IFC section 907.6.4 - Each floor shall be zoned separately. A zone shall not exceed 22,500 square feet. Each zone shall not exceed 300 feet in length.
- IFC section 907.6.6.3 – Wired phone POTS lines are not permitted for new monitoring.

Upgraded System Operation

The activation of any common area smoke detector, manual pull station, or waterflow device shall activate all notification in the building. Common area Audible/visual coverage and tenant low frequency sounder bases and strobes if installed.

Phase I & II Elevator recall - The activation of the 1st floor elevator lobby smoke detector shall recall the elevator to the 2nd floor. The activation of the 2nd or 3rd floor elevator lobby smoke detector shall recall the elevator to the 1st floor. The activation of the elevator machine room smoke detector shall recall the elevator to the 2nd floor and activate the HAT light function within the elevator.

The activation of any tenant smoke detector shall activate the low frequency sounder bases of all smoke detectors (and strobes if installed) within that tenant unit only.

- The system smoke *detectors* shall be programmed to act like single- and multiple-station *alarms*. When the *detector* is activated, the sounder base is activated; when the *detector* is cleared, the sounder base is deactivated. This will need to show a supervisory indication at the main fire alarm panel and it needs to notify the off-site monitoring company of the condition. No action needs to take place, just automatic recording.
- The system smoke *detectors* within an accessible unit shall activate the visual devices upon activation of the dwelling unit smoke detector. If the *detector* is cleared, the strobes deactivate.

Activation of two separate smoke *detectors* in two separate adjacent apartments shall be required to activate a building alarm.

Attachments: Fire Alarm System Code Analysis, Site Map, System Overview List

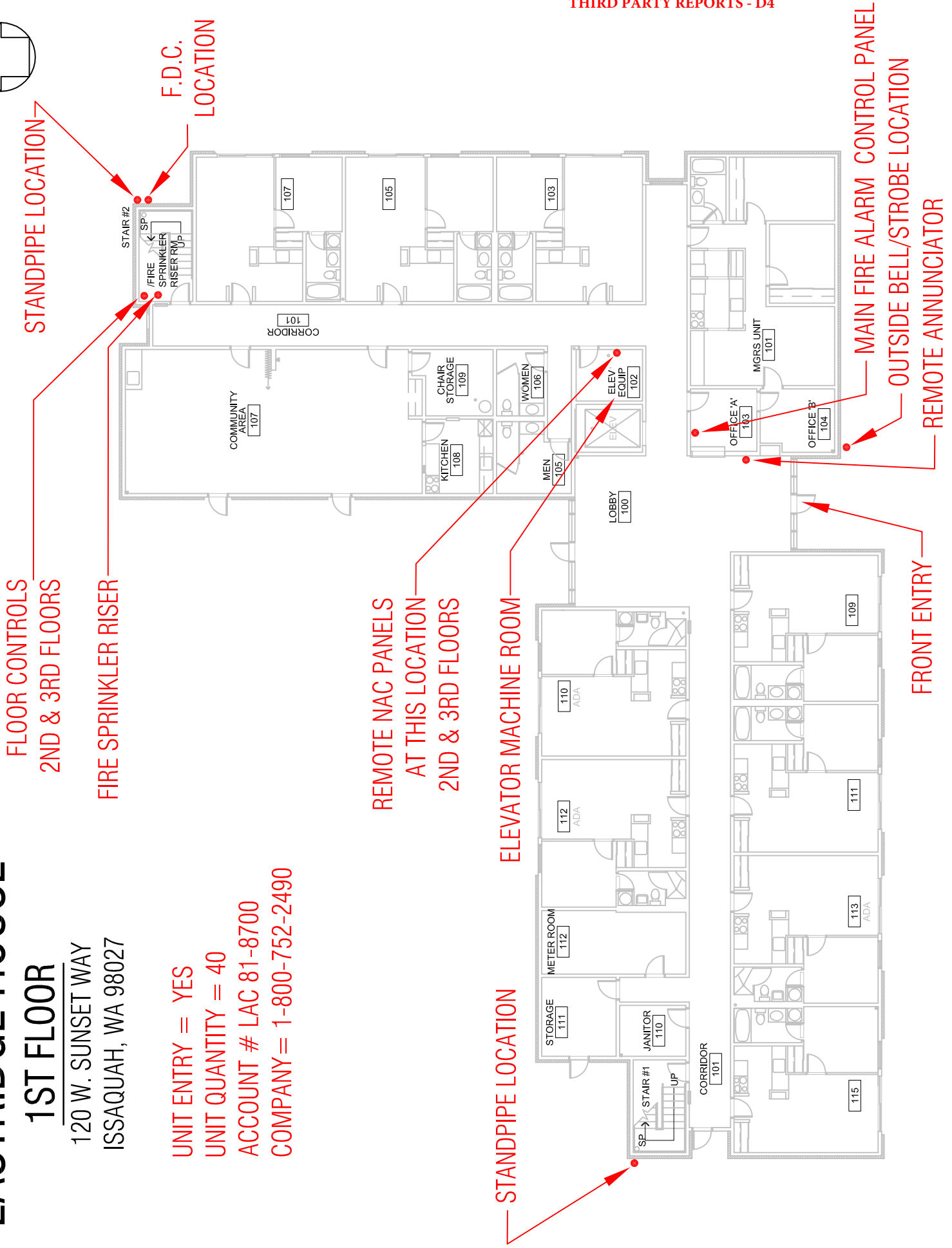
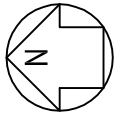
EASTRIDGE HOUSE

1ST FLOOR

120 W. SUNSET WAY
ISSAQUAH, WA 98027

UNIT ENTRY = YES
UNIT QUANTITY = 40
ACCOUNT # LAC 81-8700
COMPANY = 1-800-752-2490

THIRD PARTY REPORTS - D4



EASTRIDGE HOUSE

120 WEST SUNSET WAY, ISSAQUAH, WA 98027

Device Type	Quantity	Make	Model	Location
FACP	1	Silent Knight	SK-5820XL	Office off Main Lobby
Remote Ann	1	Silent Knight	SK-5860	Main Entry
Power Supply	2	Silent Knight	SK-5495	Janitors Closet 2nd & 3rd Flrs
Monitoring	1	POTS	RJ31x	@ Main FACP
Smoke Detector	127	Silent Knight	SK-SD505-APS	Inside units and in common spaces
Sounder Base	42	Gentex	7100TF	
Sounder Base & Strobe	36	Gentex	7139CS-C	
Heat Detector	13	Silent Knight	SK-SD505AHS	Storage, Laundry
Pull Station	14	Silent Knight	SK-SD500PS	Exits
Outside Bell/Strobe	1	Potter	MBA-10-24	
	1	System Sensor	P2RK	
Horn/Strobe	24	Gentex	GEC3-24WR	Inside Units and in common spaces
		System Sensor	PC24 Series	
Strobe	12	Gentex	GES3-24WR	Inside Units and in common spaces
		System Sensor		
Door Holder				
Elevator Recall	1			
Elev - Shunt Trip	1			
Elev - Sprink Tmpr Val	1	Milwaukee	BB-SCS	Hall near public rest rooms. Feeds elevator machine room and pit sprinklers
Wet	1			Under NE Stair #2
Floor Controls	2	TESTanDrain	1000	NE Stair #2 & 2nd/3rd Flrs
Standpipe	2			East & West Stair
Backflow - Tamper	(Inside) - 1	Potter	OSYSU-2	Under NE Stair #2
PIV	N/A			
Tamper Switches	5	Milwaukee	BB-SCS	Under NE Stair #2 & 2nd/3rd
WF Switches	3	Potter	VSR	Under NE Stair #2 & 2nd/3rd



E - SECTION

DRAWINGS & SPECIFICATIONS

- E.1 Scope of Work and Technical Specifications**
- E.2 Drawings (if not included – see attached)**



SCOPE OF WORK & TECHNICAL SPECIFICATIONS

SCOPE OF WORK

DIVISION 1 – GENERAL REQUIREMENTS

01 10 00	Summary
01 26 00	Contract Modification Procedures
01 29 00	Payment Procedures
01 31 00	Project Management & Coordination
01 32 00	Construction Progress Documentation
01 33 00	Submittal Procedures
01 40 00	Quality Requirements
01 50 00	Temporary Facilities & Controls
01 60 00	Product Requirements
01 73 00	Execution
01 73 29	Cutting and Patching
01 74 19	Construction Waste Management
01 77 00	Closeout
01 78 23	Operation and Maintenance Data
01 78 39	Project Record Documents
*****	KCHA Pay Application Form (sample)
*****	KCHA Substitute Request Form (sample)
02 41 00	Selective Demolition
06 20 00	Interior Finish Carpentry
07 92 00	Joint Sealants
09 21 00	Gypsum Wallboard
28 31 00	Fire Alarm System



LIST OF DRAWINGS

FA0.01	FIRE ALARM SYSTEM LEGEND AND NOTES
FA0.02	FIRE ALARM SYSTEM RISER DIAGRAM AND NOTES
A5.1	FLOOR PLANS

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 - B. Staffing and Experience**
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 - 06 20 00 Interior Finish Carpentry
 - Division 7 Thermal and Moisture Protection**
 - 07 84 00 Fire stopping
 - 07 92 00 Joint Sealants
 - Division 9 Finishes**
 - 09 21 00 Gypsum Wallboard
 - 09 91 00 Painting
 - Division 28 Electronic Safety and Security**
 - 28 31 00 Fire Alarm System

SECTION 001010 SCOPE OF WORK

1.0 PROJECT SUMMARY

Eastridge House is a three (3) story building that was constructed in 1971 and consists of thirty-nine (39) one (1) bedroom apartments and one (1) two (2) bedroom; all units have one (1) bathroom. The building is of wood construction with gypsum interior walls/ceilings (common corridors have a grid drop ceiling), and a masonry exterior veneer. Contractor to verify conditions. The building has one (1) elevator, one (1) main lobby, two (2) offices, one (1) garbage room, one (1) maintenance room, one (1) laundry room, one (1) elevator equipment room, one (1) electrical equipment room, two (2) three-story stairwells, one (1) community room, one (1) storage room, one (1) common kitchen, one (1) men and (1) women's restroom, and a common corridor all floors. The second and third floors contain one (1) elevator lobby and tenant units. In addition, the building houses three (3) ADA type units, all located on the first floor (ADA units 110, 112, and 113). The majority of the population consists of the elderly and disabled. KCHA has had hazardous materials testing completed in 2013. Reports supplied in bid documents.

The Eastridge House Fire Monitoring System Upgrade is design-build in nature and shall be all-inclusive for a complete turnkey system that meets all standards, KCHA specifications and plans, applicable codes, and permit requirements. KCHA has added elements to the system that may exceed jurisdictional standards. To ensure all KCHA project details are included in the Contractor's design, the Contractor will need to submit shop drawings of the new fire monitoring system to KCHA for approval before being submitted for review by the Fire Marshall. In the bid documents, KCHA has provided a site assessment of existing fire monitoring system with upgrade recommendations, and a system code analysis for new system requirements. It is up to the Contractor to design a system using the recommendations provided.

All new wiring must be concealed behind Gypsum Wall Board (GWB) or in KCHA-approved line covers. There may be variations in the layout from the plan depictions, and it is the Contractor's responsibility to verify actual conditions. The Contractor is to carry a contingency in their bid proposal accounting for variations and will be responsible for all wiring, device installation, routing, connections, testing, and restoration of the interior and exterior elements affected by the work. Existing fire alarms in tenant units will be removed and the electrical boxes covered with a blank plates. The existing fire alarms in the common hallways will be removed along with the electrical box and the drywall hole patched and painted. The wall will be painted corner to corner, top to bottom. The Contractor will keep the existing active alarm system running until the new fire monitoring system is activated and passed inspections. The duration of this project is ninety (90) calendar days from Notice to Proceed.

The Contractor must take all precautions to provide a safe work site for the residents, staff, and workers. The Contractor is to provide two-week look-ahead schedules throughout the project so that KCHA staff can notify residents of unit entries 48 hours in advance. The Contractor is responsible for protecting both tenant/KCHA physical assets and is required to mitigate dust and debris using tarps, zip walls, HEPA vacuums, etc. The Contractor to provide the Owner a turnkey fire monitoring system and include all design, reviews, permits, testing, materials, labor, and equipment in bid.

2.0 PROJECT ADMINISTRATION REQUIREMENTS

A. Pre-Construction Administration

BEFORE commencement of work begins on-site the Contractor will provide the Owner the following items:

1. Project Master Schedule

- a. Completed in Microsoft Project, Primavera or similar.
- b. Must be cost loaded to reflect Schedule of Values items.
- c. Project phasing shall be integrated into master schedule.
- d. Shall include the following project milestones:
 - 1) Contract start date (CS) TBD
 - 2) Notice to Proceed (NTP) TBD
 - 3) Construction Duration (CD) Start Date/Stop Date TBD - TBD
 - 4) Substantial Completion (SC) TBD
 - 5) Physical Completion (PC) and Warranty Start Date of Entire Project TBD
 - 6) Contract Completion (CC) of Entire Project TBD

**The dates listed above are estimated milestone dates, provided to the Contractor for incorporation and inclusion in the negotiated final project Critical Path Method (CPM) schedule. These estimated dates may change. Such changes, if any, shall not result in an automatic extension of the Final Completion date. The Contractor shall make reasonable flexibility in the schedule to accommodate any such date changes in order to accomplish the interim milestone dates (NTP, CD Start/Stop, SC, PC and CC).*

2. Schedule of Values (SOV)

- a. Each item must correlate to the project schedule.
- b. Schedule of Values to contain a five (5%) percent line item for the closeout documents.
- c. Schedule of Values to reflect detailed tasks by labor and material.
- d. Contractor to include a separate line item for each item listed below:
 - 1) Overhead and Profit.
 - 2) General Conditions.
 - 3) Material and Labor for each task or based on subcontracted work. This will allow KCHA to pay for materials purchased at the beginning of the project or during the course of construction (once KCHA has established that the Contractor has ordered, has been invoiced, and has a suitable location to store materials. See Contract documents for requirements.)
 - 4) Mobilization.

3. Submittal Schedule

All submittals to King County Housing Authority (KCHA) prior to start of related work.

- a. The Contractor shall provide and manage a schedule of all submittals required on the project as listed in each specification section.
- b. Submittals will be processed with enough time for the Owner to reasonably provide feedback fourteen (14) calendar days prior to materials being delivered to the site.
- c. Any material submitted that is not listed in the project specifications will need to be submitted with a Substitution Request Form for review.

4. Site Specific Safety Plan: The Site Specific Plan should be submitted for review then kept on site during construction. Verify regular safety meetings are being held per proposed plan.

Contractor's employees and all sub-contractors' employees will be required to wear a mask if they are in a building or a resident's unit. Contractor shall report to KCHA any COVID positive or exposed employees so KCHA can determine if any follow-up is required. All sub-contractors are to report any COVID positive or exposed employees to the Contractor.

5. **Phasing and Coordination Plan** including the following (*See section 3 item I, regarding Phasing*):
 - a. Resident access plan for entry and exiting of apartment units.
 - b. Resident parking plan for proposed parking lot closings and openings.
6. **Subcontractor List** with the names all subcontractors including contact information.

*NOTE: All items stated above must be submitted and approved BEFORE Contractor commences work.

B. Construction Administration

1. **Master Schedule:** The Contractor shall maintain (update and track) the provided project master schedule using CPM for the project. This work will progress and be reflected with the project SOV. Project phasing shall be reflected in the master schedule. The Contractor is responsible for all scheduling and coordination between all trades and any other subcontractors working for the Contractor.
2. **Two (2) Week Look-Ahead:** The Contractor will provide weekly a two (2) week “look-ahead” schedule updating the relationship of this report with master project schedule. This shall be provided for review and be a topic of discussion during weekly site meetings. This schedule will be specific to the individual tasks as well as to identify work requiring site notifications and coordination.
3. **Daily Reports:** Contractor to provide copies of daily site reports on a weekly basis. The daily report will describe daily man power, weather conditions, work in progress, delays and issues. Daily report format shall be submitted (during pre-construction phase) to Owner for review.
4. **Meeting Minutes:** Contractor to manage and provide copies of meeting minutes/notes for all pre-construction, coordination, safety and weekly Owner/Architect/Contractor (OAC) meetings. Meeting minutes format to be submitted (during pre-construction phase) to Owner for review.
5. **Notices:** It is the Contractor’s responsibility to plan, coordinate and inform KCHA of work which shall require notice. Failure to provide adequate notice that results in a delay will be fully on the Contractor.
 - a. Unit Entry: The Contractor must coordinate unit entry with the Owner such that all required Notices-to-Tenants can be posted forty-eight (48) business hours PRIOR to Entry.
 - b. Shut Downs: Contractor will provide proper notification (minimum of seventy-two (72) business hours to the Owner and (minimum of forty-eight (48) business hours to the tenants.
 - c. General Notices: The Contractor shall provide notice to Owner related to project start, potential impacts on tenants’ accessibility and moving if items which could interfere with construction progress.
6. **As-Builts:** The Contractor will be responsible to assess and record the existing conditions of any damaged or non-working items, such as existing electrical and mechanical equipment, pipe, utilities, concrete, asphalt etc., prior to removal of work. Contractor is responsible to restore or replace all finishes that become damaged as a result of work being performed. Contractor is not responsible for repairs of existing damage. As-Built drawings shall be current-to-date and will be reviewed on-site prior to each pay application.
7. **Certified Payrolls:** All Contractor employees and all sub-contractor employees will need to know their trade classification and pay rate.
 - a. Owner will be conducting on-site wage interviews verifying job classification and wage rate.
 - b. HUD Non-Routine Maintenance Wage Rates apply to this project and must be posted on-site at all times.
8. **Punch List:** When the Contractor has deemed the project as substantially complete, meaning all base bid work is complete and conforms to requirements of the specifications and quality

standards established through the mockups and as stated in the contract documents, the Contractor and a KCHA representative shall thoroughly inspect and list work that is non-conforming that the Contractor must complete prior to final payment. The work may include incomplete or incorrect installations or incidental damage to existing finishes, material, and structures. The list shall be provided to the Owner for their review and approval. All punch list items are expected to be finished and accepted by the physical completion date.

C. Closeout Administration

1. **O&M Manuals:** One (1) hard copy and one (1) electronic copy of the Operation and Maintenance (O&M) manual for all major materials and equipment shall be supplied by the Contractor to the Owner upon Project completion and prior to request for final payment.
 - a. Electronic copy to be submitted for approval prior to submitting hard copy.
 - b. O&M manual will include all warranties associated with the Work.
 - c. O&M manual will include relevant data associated with warranties and works such as
 - 1) Name of installer with all contact information.
 - 2) Name of manufacturer and location material was purchased with all contact information.
 - d. All O&M manuals are subject to Owner approval
2. **Final As-Built Drawings:** Upon substantial completion of the Project, the marked-up set of site documents shall be converted into as-built drawings and submitted to the Owner for review and approval.
3. **Permits Finals:** Upon physical completion of the Project, all completed permits and permit drawings to be submitted to Owner and City of Issaquah with final sign offs.
4. **Master Keys and Access Cards:** Upon physical completion of the Project, Contractor shall return all master keys and access cards, signing off a Key Return Form.
5. **Punch List(s):** Upon physical completion of the Project, all lists shall be completed and signed off by the Owner.

3.0 GENERAL REQUIREMENTS

A. Acknowledgements

1. By signing the contract, the Contractor acknowledges that they have reviewed and can fully implement all administrative and physical aspects of the work as described in the project scope of work, specifications and drawings. The Contractor also acknowledges that they have completed an extensive site walk of the site and accepts the site conditions.
2. The Contractor will be responsible to assess and record the existing conditions of any damaged items, such as interior, sills, drywall, and window coverings, existing pipe, and utilities, prior to removal of work. KCHA's assumption is that all items are in good working order. Contractor is responsible to restore or replace all finishes that become damaged as a result of work being performed. Contractor is not responsible for repairs of existing damage.
3. The Contractor will provide all materials, fasteners, shoring, staging, labor, equipment, and expertise necessary to provide a quality "Turnkey" project, complete with all elements of the work, safely, on time, and within budget.
4. The Owner does not foresee any change orders for work resulting in site conditions that were clearly visible and present during the Mandatory Pre-bid Site Visit. By submitting a bid the Contractor acknowledges any labor, material and equipment required for a "Turnkey" project not specifically covered in the plans and specifications has been included in their base bid.
5. The Contractor's Superintendent or Foreman will be assigned a construction master key and will be held responsible for all costs related to the re-keying should the key be lost or stolen. If the master key is lost or stolen the Contractor will be responsible for re-keying all related locksets to a new keying system by the **end of the day** the issue is reported.

6. The Contactor has and will continue to field verify all visible existing site conditions, adjacent conditions/components and quantities. If there is a discrepancy between Scope of Work, Specifications and/or Drawings, the Scope of Work shall take precedence followed by the Specifications and lastly the Drawings.
7. Any questions occurring during bidding or construction shall be resolved by direction in writing from Owner. Any issues not so resolved or any conflicts between the scope of work, specifications and plans, shall result with the Contractor bidding, furnishing and installing the most stringent condition. No exceptions. Contractor must submit an RFI if a conflict exists between the scope of work, specifications and plans.
8. It is incumbent on the Contractor to inform the Owner of any conflicts between manufacturers' requirements and the provided plans and specifications through the RFI process and prior to submitting a bid.
9. Contractor must demonstrate a comprehensive understanding that all work described in the project documents is all-inclusive and results in a complete system. Contractor to provide all materials, unless stated otherwise. All tasks must be complete with uniform fit, function, form, style and type.
10. Permits: The Owner will obtain the building permit; all other permits (including city of Issaquah jurisdiction permits or agency of jurisdiction permits) are the Contractor's responsibility. Contractor shall keep permits posted and onsite at all times
11. Plans & Specifications: The Contractor shall keep all associated permits and the approved permit plan set on site at all times. The Contractor will keep and maintain, on-site, a separate but complete set of construction drawings and specifications for markups and daily use.
12. Any damage caused by construction related activities (i.e. demolition, laydown areas) to existing physical assets to remain will be the Contractor's responsibility to correct at no cost to the Owner.

B. Staffing and Experience Requirements

1. The Contractor is expected to be on-site working each consecutive weekday unless directed otherwise by Owner.
2. A qualified and experienced full time site Superintendent or Foreman will be on site at all times.
3. The Contractor shall employ a sufficient number of workers and equipment to perform the Work in a diligent and expeditious manner. KCHA expects the Contractor to adequately staff the project to maintain the schedule, including reallocating and increasing staffing as needed to correct any slippage in the schedule.
4. Contractor and sub-contractor employees shall perform all work in a professional manner. All tasks must be complete with uniform fit, function, form, style and type.
5. All trades are to have a minimum of three (3) years of experience in their given trade.
6. Tradesmen must have the proper certification to perform work or to operate specific equipment that requires certifications and/or licenses.
7. The Contractor shall immediately remove from the site any of its employees or its subcontractors' employees, as the Owner shall deem incompetent, careless, insubordinate or otherwise disruptive to the progression of the project.

C. Quality Assurance / Quality Control

1. All Work shall be performed using new materials, installed plumb, level, true to the line, free of defects, and completed in a professional workmanlike manner to provide a complete, safe, and operable "Turnkey" installation.

2. The Contractor will follow all manufacturers' requirements and recommendations for the installation of all products to maintain the integrity of all manufacturer's warranties.
3. Mockups: The Contractor will provide all mockups, within his base scope, required for the project as listed in each specification section. Mockups and color samples will be produced with enough time for the Owner to reasonably provide feedback one (1) week prior to these components being staged and implemented on site. Mockups will set expectations of quality expected for the project.
4. Quality Assurance/ Quality Control: The Contractor will provide ongoing QA/QC at each step of work and take corrective measures prior to the next element of work being performed. This will include, but is not limited to, sequencing partial punches and substantial completions throughout the project.
5. Contractor responsible for subcontractor's quality of workmanship and materials, completion of scope, and scheduling on site.
6. It is incumbent on the Contractor to inform the Owner of any conflicts between manufacturers' requirements and the provided plans and specifications through the RFI process and prior to submitting a bid.

D. Inspection of Work

1. Code Compliance: All work will be code compliant and without defect for all materials and applications at time of KCHA punch inspection.
2. Owner Progress Inspections: All work is subject to Owner inspection and approval and is the responsibility of the Contractor until it is turned over to Owner.
3. Jurisdiction Inspections (as required per permit): The Contractor is required to attend all inspections, and inform KCHA representative within 48 hours prior to such scheduled inspections. Contractor is responsible for any costs associated with re-inspections for work not approved by the Authority Having Jurisdiction.

E. Site Requirements

1. All communication and coordination will be with Owner representatives only.
2. On-site tenant support services (i.e. laundry, common space, maintenance facilities and storage) must be fully accessible and operational at all times.
3. Work shall be coordinated not to interrupt services (i.e. garbage, mail, EMS, etc.).
4. Emergency and tenant access must be maintained at all times.
5. The Contractor is required to maintain the cleanliness of the work-site; there will be daily inspections by the Owner to verify cleanliness, safety and tenant access. The Contractor will be responsible for cleanup and housekeeping of work limits, staging areas, and Contractor's parking areas by the end of each business day. Contractor to secure all equipment, materials, and tools, ensure that unfinished work areas are protected and secure prior to leaving for the weekend.
6. No noise prior to 8:00am but layout and work setup can begin at 7:30am unless permission is granted by the Owner's Representative.
7. All interior work in each unit to be completed within 5 consecutive days. See Section 2 Project Administration Requirements; subsection B Construction Administration – Notices.
8. If Unit access is required, Contractor will not enter units before 8:00AM, once proper notification has been posted by KCHA.
9. The Contractor is responsible for providing sanitary services, potable water and field office spaces for their agents. No public bathroom, drinkable water or office space is available onsite, for the Contractor or its agents.
10. The Contractor must read and comply with all safety requirements as stated in Section 4 A.

F. General Restrictions

1. No parking in fire lanes. Fire lanes will be uninhibited at all times for first responder and tenant service access, unless otherwise approved by Fire Marshal.
2. No smoking on site by any Contractor or any of the Contractor's representatives (i.e. subcontractors, suppliers, consultants, etc.).
3. No washing out of any materials on site will be allowed. All contaminated or silt laden water must be contained and responsibly disposed of offsite.
4. No loud or offensive music is permitted.
5. No dumping on site. Contractor will not be allowed to use Owner's waste facilities.

G. Work Hours

1. Work to be performed during normal hours of operation from **8:00am to 4:30 pm**. There will be no work on weekends (unless prior approval has been granted by Owner). Owner does not pay overtime.
2. There will be no work on Owner holidays. Contractor to verify with Owner's Representative if there are any Owner holidays occurring during the duration of the project.

H. Contractor's Responsibilities

1. Contractor will be responsible to provide power for all work described. Contractor will not be allowed to use any on-site power unless prior approval has been granted by the Owner.
2. Water use available with previous approval from Owner. Contractor must obtain approval of Owner for water usage forty-eight (48) hours prior to use.
3. The Contractor is responsible for City of Issaquah hauling route, plans, and street use permits.

I. Project Phasing

1. This will directly impact forty (40) residential dwelling units. The intent of the phasing plan is to provide the least disruption to tenant units and make the site access available to as many parking spaces as possible at all times. Contractor parking and lay-down area will be determined on site with property staff.
2. The Contractor's phasing plan must meet Owner expectations of providing the least impact on the residents which includes access to the site, their units and parking.
3. The Contractor's design of the new fire monitor system must be approved by KCHA prior to being submitted to local fire marshal for review. KCHA design team will take up to two (2) weeks for review.
4. Owner anticipates multiple sequencing sections in the envelope replacement of these buildings. The Owner's expectation is not to open up "Vast" areas of the project for prolong periods of time or shutting down public areas to accommodate staging, stock piling, mobilization or for convenience of construction. Contractor must realize and accept that this project is being conducted in a fully occupied housing development and all that it encompasses (families, elderly, children out of school, daily traffic from families coming and going at all times during the day). The Owner is not only concerned about scope, schedule and budget, but the impact on its residents. The Contractor must take these considerations in to their phasing and sequencing accordingly. The Contractor must review their risk factors to accommodate these considerations in their bid.

4.0 SAFETY, PROTECTION & RESTORATION

A. Safety

1. Contractor shall provide and have on site at all times a site specific safety plan.

2. Contractor's employees and all sub-contractors' employees will be required to wear a mask if they are in a building or a resident's unit. Contractor shall report to KCHA any COVID positive or exposed employees so KCHA can determine if any follow-up is required. All sub-contractors are to report any COVID positive or exposed employees to the Contractor.
3. Comply with all safety and health codes within Local, State and Federal jurisdictions.
4. All work must operate within OSHA and State-equivalent (WISHA) standards and requirements.
5. The Contractor shall conduct weekly safety meetings; the minutes from these meeting are to be available to the Owner upon request. A schedule for safety meetings will be provided with the Contractor's submittal of the Safety Plan. Confirmation that the weekly safety meeting did take place and the topic of the safety meeting will be stated in the weekly site meeting minutes.
6. All workers on-site will wear high visibility vests or apparel with company logo or name that clearly identifies the workers.
7. All workers must be equipped with proper personal protective equipment (PPE) and be wearing it when appropriate or required while they are on-site (i.e. hardhat, safety glasses, ear plugs and fall arrest etc.).
8. Contractor to keep walkways free of debris, materials, tools and equipment at all times. Access must be maintained for residents at all times. If access is blocked or limited, the Contractor must ensure that a safe, alternative route can be maintained and accessed by residents.
9. The Contractor will be diligent in ensuring that all safety measures are performed at all times for all aspects of work being performed.
10. Work Areas shall be cordoned off with safety fencing and/or caution tape while work is in progress.
11. Contractor is responsible for safety and security of work areas affected by work and will provide temporary guardrails, temporary cover and/or locks for openings. Contractor's main focus is the safety of his work force and the safety of KCHA's residents and staff.
12. The Contractor is responsible to secure all materials and equipment to prevent damage and to also take precautions to prevent theft of their personal items.

B. Protection

1. Protect existing concrete walkways, paving, landscaping and all other finished surfaces which are to remain.
2. Contractor will provide protection at landscape areas where material laydown, storage, construction trailers or equipment are stored.
3. Contractor is responsible to protect and maintain all areas within the project work limits including, but not limited to, landscaping, hardscapes, exterior amenities, existing improvements, and adjacent/abutting finishes to remain (roofing, soffits, gutters etc.). If necessary, Contractor shall coordinate with Owner for removal / relocation of tenant property on front and back patios.

C. Restoration

1. Contractor responsible for restoration of any damage due to construction related activities. Contractor is advised to do a pre-construction walk and do an assessment with KCHA site personal prior to construction to note and document existing conditions.
2. Contractor will restore all landscape impacted by construction to existing pre-construction conditions.
3. Contractor to restore all lawn areas with Sod.

- a. Grass areas that are identified for replacement or are damaged from construction activities are to be conditioned with new 3-way topsoil mix to a depth of (4") inches and tilled in to existing soils.
 - b. The Contractor shall roll to consolidate topsoil for areas to be sodded leaving surface smooth, uniform, firm against deep foot printing, and with a fine loose texture.
 - c. Contractor must ensure that sod is adequately watered until it becomes established and will survive through the 1 year warranty period.
 - d. Existing sod that has been removed shall be disposed of legally.
4. Planted areas that are damaged are to be conditioned with new wood chip mulch:
- a. Will be free from deleterious materials and suitable as a top dressing.
 - b. Loosen subgrade of planting beds to a minimum of 4 inches. Remove stones larger than 1" and sticks, roots, rubbish and other extraneous matter and legally dispose. Mulch shall contain minimal nutrient content.
 - c. Areas shall be conditioned with new top soil, tilled in to a depth of two (2") inches, and then two (2") inches of mulch placed throughout the affected area. Mulch should be a minimal nutrient, non-growth promoting mulch (non-die/stain/colored, wood chip/mulch, mulch that does not promote growth) spread around the affected area and section of planting bed/box/defined area. Contractor should work with KCHA to determine limits of mulch required for the project.

D. Hazardous Materials

1. If lead based paint is known to be present, the Contractor is responsible for removal using the HUD Lead-Safe-Work protocol. HUD Lead Safe Work protocol is more restrictive than RRP protocols. Contractors should refresh all workers on the HUD portion of Lead Safe work Practices before the project starts. The contractor will be responsible to retain copies of all workers RRP training certificates on the work site at all times, and be able to produce them when asked.
2. Owner will make any hazardous material reports available to the Contractor. Contractor will be responsible to determine at what level of abatement and protection is required when disturbing hazardous materials.
3. The Contractor agrees to indemnify, defend and hold the Owner harmless from any claims arising out of or relating to the improper handling of hazardous materials that may be present on site.
4. Contractors are responsible for reviewing all Hazmat surveys provided by KCHA and must identify all areas or works that have lead base paint, or asbestos containing materials. Contractor is responsible for sharing hazmat surveys with their sub-contractors prior to any work completed on site.
5. If asbestos containing materials (ACM) are present. These should be removed by properly trained and protected personnel using appropriate work practices and engineering controls. Workers potentially working with (ACM) are advised to confirm training requirements of WISHA and to ensure that proper worker protection and work practices are implemented.
6. The Contractor agrees to indemnify, defend and hold the Owner harmless from any claims arising out of or relating to the presence of asbestos/hazardous material in the Owner's building that the Contractor has sub-contracted the removal and legal disposal of the asbestos/hazardous material.

5.0 DIVISIONS

DIVISION 1 GENERAL CONDITIONS

A. Site Staging and Deliveries

1. Contractor will coordinate bulk material deliveries with Owner forty-eight (48) hours prior to delivers where potential for parking access will be temporarily blocked – no more than fifteen (15) minutes.
2. Contractor and subcontractors will only be allowed to off load and load up tools – no more than fifteen (15) minutes. Heavy equipment used specifically for construction will not block emergency access. Construction activities will not block parking areas not scheduled for work.
3. Contractor to use existing parking on site to stage materials in areas approved by the property manager. Property manager to designate parking spaces that will be fenced off around the perimeter and locked, to store materials for current phases of work. KCHA will work with property manager to designate areas around the building for additional material storage. No trash and debris will be stored, and must be removed from the site on a daily basis. Contractor must perform daily cleanup around staging site to ensure dust and debris does not build up in the parking lot.

B. Temporary Facilities

1. Use of onsite restroom facilities will not be permitted. Contractor is responsible for portable toilets; Contractor to consult with Owner for placement.
2. Contractor is not permitted to use tenant or building power without KCHA approval. For bidding purposes, Contractor is to provide power for this project.
3. Contractor to provide all dumpsters, job shacks, con-x boxes, fencing etc. Locations to be negotiated and approved by Owner.

DIVISION 2 SITE CONSTRUCTION

A. Demolition

Refer to Specification Section 024100 Selective Demolition.

1. The Contractor shall remove and legally dispose of all materials as required by the contract documents to allow for the installation of all new specified materials. Materials included to be removed and disposed of are as follow (but non-inclusive): siding, foam board, fasteners, exterior trim, windows, exterior doors, door hardware, window coverings, hose reels, hose bibs, exterior lighting fixtures, select electrical service masts and all related envelope assembly components from structure per scope of work, drawings and specifications.
2. Contractor shall salvage and/or protect all materials as necessary until they are to be reinstalled, (i.e. select hardware, fire extinguishers and cabinets, communication boxes, pipe penetrations, etc.). This list is not all inclusive and the Contractor must verify which items are to be salvaged per the contract documents and in coordination with the Owner prior to demolition activities.
3. Install temporary barriers as necessary to protect tenants and staff during demolition, but ensure that the measures taken can be easily breached by first responders in case of emergency.
4. Recycling efforts will be performed to the fullest extents possible as specified in the contract documents. Contractor to comply with recycling measures and reporting per Specification section 01 74 19 Construction Waste Management and Disposal.
5. Return structures and surfaces to existing conditions prior to commencement of demolition work or as directed by Owner
6. Contractor to protect all areas where demolition will be performed. Current alarm system to remain active until Contractor is ready to switch over to the new fire system.

B. Existing Utilities

1. The Contractor is responsible to locate all public and private utilities which may impact the work.

2. Contractor to verify any existing equipment, devices, fixtures, cabling, wires and conduit is in operational order prior to moving, relocating, replacing or rerouting. KCHA makes the assumption that equipment was working prior to Contractor's arrival on site and should continue to work at the end of the project.
3. Contractor to include in bid all necessary modifications, labor and parts necessary to run/re-route all existing cabling and exposed conduit. All costs associated with work noted will be Contractor's responsibility.
4. Contractor responsible for repairing all wires, cables, communication boxes etc. damaged by construction activities on same day incident occurs.
5. Contractor is responsible to air seal and /or fire seal all penetrations, vents and appurtenances.
6. Contractor is responsible to carefully remove and protect all utility and communication services on structure to be reinstalled. Services shall be maintained and operational for duration of project unless otherwise scheduled disruption is required to perform work.
7. Terminations and caps will be clearly marked on site and recorded in the project record drawings (i.e. red line drawings or as-builts) with clear and accurate dimensions.

C. Landscaping

1. Prior to start of work, the Contractor and Owner shall walk the site identifying the condition of all trees, plants, sod and landscaping. Any trees, plants, sod etc. damaged due to construction activities must be replaced by the Contractor with like vegetation at Contractor's expense.
2. Restore all landscape impacted by construction to existing pre-construction conditions. Grass areas to be restored with sod. See requirements above in Section 4, Subsection C.

D. Locating And Utilities

1. Contractor responsible to locate all public and private utilities that may be impacted by construction work.
2. Contractor to be responsible to repair and or replace all utilities and building components damaged by construction work.

DIVISION 6 WOOD & PLASTICS

A. Rough Carpentry

1. Contractor will be responsible for 100% blocking required for all GWB patching.
2. For all GWB repairs labor and materials will be included to, patch, texture, and paint to match existing adjacent surfaces. Match texture to blend in with existing texture and paint corner to corner, top to bottom.
3. Contractor will be responsible to mask off units prior to installing trim and painting and thoroughly clean area of work inside each residential unit at the end of each work day.

DIVISION 7 THERMAL AND MOISTURE PROTECTION

A. Penetration Fire stopping

Refer to Specification Section 078400 Fire Stopping

1. Contractor is responsible to restore and / or install fire stop systems for all penetrations joints, and perimeter fire containment designed and tested to maintain fire-resistance rated assemblies, conforming to provisions of latest version of the International Building Code (IBC).
2. Contractor shall ensure that all Fire stopping material installed by its employees or sub-contractors is secured, fastened, adhered and properly placed at locations per industry standards.
3. Contractor to coordinate inspections with building officials, AHJ and/or the Owner for

inspecting firestop penetrations prior to cover.

B. Joint Sealants

079200 Joint Sealants

1. Contractor is responsible to air seal all penetrations caused by existing pipe demolition and new water supply installation. This includes proper cleaning and preparation of joint surfaces and installation of backer rod where necessary.
2. All joint surfaces to be properly prepared, dry and clean for new sealant application. Sealants applied shall be tooled and with joint seams no wider than $\frac{3}{4}$ " per project specifications.
3. Use only skilled installers who are trained and experienced with specified sealants

DIVISION 9 FINISHES

A. Drywall & Texture

Refer to Specification Section 092100 Gypsum Wall Board.

1. Contractor will patch any interior or exterior wall or siding damage incurred during demolition or installation. All GWB patches to have 100% blocking at all 4 sides. 2x material and $\frac{3}{4}$ " plywood is acceptable for backing. All work for existing finishes to be performed in accordance with safe work practices.
2. The Contractor will remove all electrical boxes containing the existing fire alarms in the common corridors and patch with new drywall. Tape, texture PVA, paints wall corner to corner, top to bottom.
3. Contractor shall install/reinstall any or all fire rated assemblies that were disturbed during the project.
4. Contractor shall protect all finished surfaces from dust, joint compound, texture or overspray.
5. Contractor shall install all GWB patches, PVA, texture, primer and paint.

B. Painting

1. Contractor responsible for all GWB patching for all work related to removal of existing GWB, tape, joint compound and texture to match existing surface plane and texture quality and density. Any corner bead replacement will be of similar style (i.e. square for square corners) and is the responsibility of the Contractor.
2. This work shall be inclusive of all labor, materials and equipment to perform surface preparation, fill, sanding and prime and paint.
3. Prime and paint all surfaces necessary to provide a uniform and aesthetic paint application to match existing. New GWB to be primed (PVA) prior to application of two (2) coats of high quality interior latex paint. Existing interior walls that abut new GWB patches will be painted with two (2) coats of high quality latex paint from corner to corner and top to bottom.
4. NOTE: primer will not be considered the first coat, two (2) paint finish coats are required. All texture to be primed prior to paint.
5. All caulking and sealants shall be cured per manufacturer's instruction prior to paint touch up. Caulk to be high quality paintable latex caulk. Caulk and/or putty all joints, seams and nail holes using approved materials and methods as specified and per manufacturer's instructions. All caulking and putty to be applied in a smooth and uniform fashion without defect, gaps, seams or smears to plane and seamlessly integrate with abutting surfaces.
6. Contractor will patch, texture and paint to match any existing interior or exterior wall or siding damage incurred during demolition or installation.
7. Contractor shall leave one (1) unopened gallon of matching wall paint for KCHA site staff

8. Touch up shall be allowed for interior walls unless there is otherwise noticeable variation of the new versus the existing paint color/texture. Interior walls shall be painted from corner to corner, top to bottom, contractor may not feather in finishes.
9. Any new KCHA approved raceways shall be painted to match existing walls.

DIVISION 28 FIRE MONITORING SYSTEM

- A. The fire monitoring system is to be an all-inclusive design/build element of this project. The Contractor is responsible to price the entire scope of work for a complete turn-key fire monitoring system that will meet or exceed KCHA specifications, and all jurisdictional fire and building codes. In addition to all physical work the Contractor is to provide the following (this is not an all-inclusive list): all engineering, shop drawings, mock-ups, permits, fire watch for the duration of the project, as-built drawings, warranties, and all other associated work. Units #110,#112, and #113 (ADA Units) to receive audible and visual in accordance with section 907.5.2.1 and 907.5.2.3.3 of the International Building Code and section 18.5.5.8 of NFPA 72.

END OF SECTION

SECTION 01 1000 SUMMARY

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes the following:
1. Work covered by the Contract Documents.
 2. Phased construction.
 3. Work under other contracts.
 4. Owner-furnished products.
 5. Owner's occupancy requirements.
 6. Applicable Codes.
 7. Reference standards.
 8. Use of premises and work restrictions.
 9. Specification formats and conventions.
 10. Execution, correlation and intent – Contract Documents.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

- A. Project Identification:
1. Project Name: Eastridge House Fire Monitoring System Upgrade
 2. Project Location: 120 West Sunset Way, Issaquah, WA 98027
- B. Owner/Developer: King County Housing Authority
1. Owner's Representative: Don Hatfield
 2. Contact Phone: 206-574-1213
- C. Architects / Engineer:
1. Representative: King County Housing Authority
 2. Contact Phone: 206-574-1213
- D. Reference Section A of the Bid Documents for scope of work.

1.4 PHASED CONSTRUCTION

- A. Construction shall be phased to accommodate Owner's desired schedule as noted in the bid documents and/or drawings, if applicable. Final Project Schedule shall include

phasing schedule to be prepared by the Contractor, and reviewed and approved by the Owner.

- B. Contractor shall prepare a phasing plan to maintain access to residential units during construction. Plan to be reviewed and approved by Owner prior to Work commencing.
- C. Before commencing Work of each phase of construction, submit an updated copy of Contractor's Final Project Schedule showing the sequence, commencement and completion dates, and move-out and -in dates of residents for all phases of the Work.

1.5 WORK UNDER OTHER CONTRACTS

- A. General: Cooperate fully with separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying work under this Contract. Coordinate the Work of this Contract with work performed under separate contracts.

1.6 OWNER-FURNISHED PRODUCTS

- A. Owner will furnish products as indicated. This section includes receiving, unloading, handling, storing, protecting, and installing Owner-furnished products.
- B. Owner-Furnished Products:
 - 1. Products and materials as noted on drawings or otherwise indicated for re-use.
 - 2. Products and materials as noted on drawings or otherwise indicated to be supplied by Owner.

1.7 OWNER'S OCCUPANCY REQUIREMENTS

- A. Owner Occupancy of Completed Areas of Construction: Owner reserves the right to occupy and to place and install equipment in completed areas of the building before Substantial Completion. Such placement of equipment and partial occupancy shall not constitute acceptance of the total Work. PRIOR to partial Owner Occupancy:
 - 1. Owner will prepare a Certificate of Substantial Completion for each specific portion of the Work to be occupied.
 - 2. Contractor is responsible for obtaining a Certificate of Occupancy from authorities having jurisdiction before Owner occupancy.
 - 3. The mechanical and electrical systems shall be fully operational; all required tests and inspections shall be successfully completed for areas to be occupied. On occupancy, Owner will operate and maintain mechanical and electrical systems serving the occupied portions of building.
 - 4. On occupancy, Owner will assume responsibility for maintenance and custodial service for the occupied portions of building.
 - 5. Coordinate insurance requirements with Owner prior to Owner occupancy of completed areas of the building.

1.8 CUTTING & PATCHING – Refer to Section 01 7329 – Cutting and Patching.

1.9 APPLICABLE CODES

- A. Perform all Work in accordance with the current code requirements of the city holding jurisdiction over the site where Work is to be completed.

- B. Certification of Code Compliance: All materials, methods and equipment shall comply with requirements of applicable codes and the Contract Documents, including requirements of all incorporated standards. The Contractor shall furnish, as a part of the Contract, certification of such compliance if requested by the Architect or the Code Enforcing Agency. Such certification shall be submitted in the form of test results or other data from a recognized independent testing laboratory. Contractor shall coordinate and provide all required submittals to the Code Enforcing Agency in a timely manner so as to not delay progress of the Project.

1.10 USE OF PREMISES AND WORK RESTRICTIONS

- A. General: Contractor shall have full use of premises for construction operations subject to phased construction requirements as specified in this Section and as indicated on Drawings by the Contract limits.
 - 1. Security Procedures: Refer to the Scope of Work Division 1, Section 4 Safety, Protection & Restoration and 01 5000 Temporary Facilities and Controls, for required security procedures to be followed while working at this building.
 - 2. Contractor Identification: All Contractors on site shall be easily identifiable and must wear clothing, name badges, hardhats, safety vests, or other visible identification or identifying article (approved by Owner) with employee's, laborer or staff member's company logo or company name.
- B. Use of Site: Limit use of premises to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
 - 1. Limits: Confine construction operations to areas as indicated on drawings.
- C. Use of Parking Lot: Limited.
- D. Work Restrictions, General: Comply with restrictions on construction operations.
 - 1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
- E. On-Site Work Hours: Work in the existing occupied buildings will start no earlier than 8:00am, and will be completed by 4:30pm. Hours for work performed outside of the building will be at the discretion of Owner's Representative.
 - 1. Early Morning Hours: As approved by Owner's representative.
 - 2. Hours for Utility Shutdowns: Notify Owner and all affected utility companies seventy-two (72) hours in advance of proposed shutdown.
 - 3. Contractor to notify residents of Work a minimum of forty-eight (48) hours prior to start of Work.
 - a. If Work progress or new work affects additional or a new set of residents, the Contractor must give a new notice of work to all affected residences a minimum of forty-eight (48) hours prior to start of Work.
 - 4. Hours for Core Drilling and other loud activities must comply with city of jurisdiction's noise codes.
- F. Nonsmoking Properties. All of King County Housing Authority properties are nonsmoking.

- G. Controlled Substances: Use of tobacco products and other controlled substances on Project site is not permitted.
- H. Employee Screening: Comply with Owner's requirements for drug and background screening of Contractor personnel working on Project site.
 - 1. Maintain list of approved screened personnel with Owner's representative.

1.11 SPECIFICATION FORMATS AND CONVENTIONS

- A. Specification Format: The Specifications are organized into Divisions and Sections using the 33-division format and CSI/CSC's "2010 Master Format" numbering system.
 - 1. Division 01: Sections in Division 01 govern the execution of the Work of all Sections in the Specifications.
- B. 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. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural and plural words shall be interpreted as singular, where applicable, as the context of the Contract Documents indicates.
 - 2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.
 - a. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

1.12 EXECUTION, CORRELATION AND INTENT – CONTRACT DOCUMENTS

- A. General: If there is a discrepancy between Scope of Work, Specifications and/or Drawings, the Scope of Work shall take precedence followed by the Specifications and lastly the drawings. Contact Owner immediately for clarification of conflicts, corrections and clarifications.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION (Not Used)

END OF SECTION 01 1000

SECTION 01 2600 CONTRACT MODIFICATION PROCEDURES

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for handling and processing Contract Modifications.
- B. Related Sections:
 - 1. Division 01 Section "Product Requirements" for administrative procedures for handling requests for substitutions made after Contract award.

1.3 MINOR CHANGES IN THE WORK

- A. Reference Article 7 in the General Conditions.

1.4 PROPOSAL REQUESTS

- A. The Contractor will have ten (10) calendar days from first notification to supply Owner with the information outlined in this section.
- B. Owner-Initiated Change Order Requests (COR): Contractor will issue a detailed description of:
 - 1. 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.
 - 2. Change Order Requests (COR) and Construction Change Directives (CCD) shall be initiated by the Owner, dated and sequentially numbered on Owner provided forms.
 - 3. CORs are not instructions either to stop Work in progress or to execute the proposed change.
 - 4. After receipt of COR, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Provide a cost breakdown, including overhead and profit as a separate line item, and time extension request as provided for in Article 7 of The General Conditions.
 - b. Provide all necessary product information, specifications, etc. required to justify any Contractor requested changes.
 - 5. The allowed markup shall cover all indirect project costs, including but not limited to, the project Overhead, Profit and General Conditions
 - a. The Contractor shall be allowed a maximum of fourteen (14%) percent Overhead, Profit, and General Conditions, on the cost of craft labor,

- equipment, small tools and materials for self-performed Change Order work.
- b. The Contractor shall be allowed a maximum of eight (8%) percent Overhead, Profit and General Conditions on the cost of craft labor, equipment, small tools and materials for Subcontractor Change Order work. The Contractor is not allowed to take profit on the profit of the Subcontractor as stated in form HUD-5370, section 29.
 - c. A Subcontractor shall be allowed a maximum of fourteen (14%) percent of the cost of craft labor, equipment, materials and small tools for Overhead, Profit and General Conditions, for self-performed Change Order work.
 - d. A Lower-Tier Subcontractor shall be allowed a maximum of fourteen (14%) percent of the cost of craft labor, equipment, materials and small tools for Overhead, Profit and General Conditions, for self-performed Change Order work.
6. Include a list of quantities of products required (or eliminated) their unit costs and a total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 7. Indicate applicable taxes, delivery charges, equipment rental and amounts of trade discounts.
 8. Include costs of labor and supervision directly attributable to the change.
 9. Include an updated Contractor's Final Project 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.
 - a. Time extension requests must demonstrate the impact on the project Critical Path Schedule. See the General Conditions Article 15 and Section 01 3200 - Construction Progress Documentation.
 10. Review all pricing provided by subcontractors and suppliers for accuracy and completeness. Verify that their scope of work is consistent with the requested change. Verify math is correct and that markup rates complies with the General Conditions.
 11. After signing the Change Order Request or CCD, the Contractor shall return it to the Owner.
 12. Quotation Form: Use forms acceptable to Owner.
 13. After review of the Contractor's price, cost breakdown and requested time extension, if any, the Owner will submit for estimation and do one of the following:
 - a. Sign and route for approval.
 - b. Reject and resubmit to the Contractor for pricing correction.
 - c. Revise the Change Order Request or CCD and submit to the Contractor for repricing.
 14. Prior to the Owner's acceptance of Change Order Requests, appropriate personnel shall also review the change requests.
- C. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Owner.
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. Provide a cost breakdown, including overhead and profit as a separate line item, and time extension request as provided for in Article 7 of the General Conditions.
3. Provide all necessary product information, specifications, etc. required to justify any Contractor requested changes.
4. Allowances for direct supervision, safety, small tools, overhead and profit are limited by the General Conditions, Article 7.1.1.
5. Include a list of quantities of products required (or eliminated), their unit costs and total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
6. Indicate applicable taxes, delivery charges, equipment rental and amounts of trade discounts.
7. Include costs of labor and supervision directly attributable to the change.
8. Include an updated Contractor's Final Project 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.
 - a. Time extension requests must demonstrate the impact on the project Critical Path Schedule. See the General Conditions, and Section 01 3200-Construction Progress Documentation.
9. Comply with requirements in Division 01 Section "Product Requirements" if the proposed change requires substitution of one product or system for product or system specified.
10. Proposal Request Form: Use form acceptable to Owner.
11. After review of the Contractor's price, cost breakdown and requested time extension, if any, the Owner will submit for estimation and do one of the following:
 - a. Sign and send on for approval.
 - b. Reject and resubmit to the Contractor for pricing correction.
 - c. Revise the Change Order Request or CCD and submit to the Contractor for repricing.
12. Prior to the Owner's acceptance of Change Order Requests, appropriate personnel shall also review the change requests.

1.5 CONSTRUCTION CHANGE DIRECTIVE (CCD)

- A. The Contractor will have ten (10) calendar days from first notification to supply Owner with the information outlined in this section.
- B. Construction Change Directive: The Owner may issue a Field Authorization in accordance with provisions in Article 7, General Conditions. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
- C. Documentation: Maintain detailed records on a time and material basis of Work required by the CCD, with supporting documentation as required by CORs.
 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract, consistent with Article 7 of the General Conditions of the Contract.

1.6 CHANGE ORDER PROCEDURES

- A. The Contractor will have ten (10) calendar days from first notification to supply Owner with the information outlined in this section.
- B. When approved and signed by the Owner, the Construction Change Directive will either be included in a Change Order Request (COR) to be charged against the Contract Allowance, or will be included in a formal Change Order, which will modify the Contract amount.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION (Not Used)

END OF SECTION 01 2600

**SECTION 01 2900
PAYMENT PROCEDURES**

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

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

1.3 DEFINITIONS

- A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

1.4 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the Schedule of Values with preparation of Contractor's Master Project Schedule.
 - 1. Correlate line items in the Schedule of Values with other required administrative forms and schedules, including the following:
 - a. Application for Payment forms with Continuation Sheets.
 - b. Submittal Schedule.
 - 2. Submit the Schedule of Values to Owner at earliest possible date but no later than fourteen (14) calendar days after the date of bid opening.
 - 3. Sub-schedules: Where the Work is separated into phases requiring separately phased payments, provide sub-schedules showing values correlated with each phase of payment.
- B. Format and Content: Use the Project Documents as a guide to establish line items for the Schedule of Values. Lines items are based on Scope of Work and sequencing.
 - 1. Identification: Include the following Project identification on the Schedule of Values:
 - a. Project name and location.
 - b. Name of Owner.
 - c. Owner's contract number.
 - d. Contractor's name and address.
 - e. Date of submittal.
 - 2. Arrange the Schedule of Values in tabular form with separate columns to indicate the following for each item listed:

- a. Item #, including separate line for an Allowance (if applicable).
 - b. Description of the Work.
 - c. Total Dollar Value.
 - d. Previous Application Amount.
 - e. Dollar Amount Charged on Current Pay Application.
 - f. Stored Materials.
 - g. Total Complete and Stored.
 - 1) Percentage of the Contract Sum to nearest one-hundredth percent, adjusted to total one hundred (100%) percent.
 - h. Balance to Finish
 - i. Retainage
3. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Documents. Provide several line items for principal subcontract amounts, where appropriate.
 4. Round amounts to nearest one (1) cent; total shall equal the Contract Sum.
 5. Provide a separate line item in the Schedule of Values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
 - a. Differentiate between items stored on-site and items stored off-site. Include evidence of insurance or bonded warehousing per Article 9.3.2 AIA A201-2017 General Conditions.
 6. Provide separate line items in the Schedule of Values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
 7. Each item in the Schedule of Values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
 - a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the Schedule of Values or distributed as general overhead expense, at Contractor's option.
 8. Schedule Updating: Update and resubmit the Schedule of Values before the next Applications for Payment when Change Orders result in a change in the Contract Sum.

1.5 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment shall be consistent with previous applications and payments as certified by Owner and paid for by Owner.
- B. Payment Application Times:
 1. The date for each progress payment is indicated in the Contract between Owner and Contractor.
 2. The period of construction Work covered by each Application for Payment is the period indicated in the Contract.
- C. Payment Application Forms:

1. Use Payment Application forms as provided by Owner for Applications for Payment.
- D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Owner will return incomplete applications without action.
1. Entries shall match data on the Schedule of Values and Contractor's Final Project Schedule. Use updated schedules if revisions were made.
 2. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
 3. Provide current Subcontractor List with each Application for Payment.
- E. Transmittal: Submit one (1) signed and notarized original Application for Payment to Owner by a method ensuring receipt within forty-eight (48) hours. The Application for Payment shall include intent to pay prevailing wages and a running spreadsheet that itemizes both the intent and affidavit of wages paid to date for each subcontractor.
1. Transmit Application for Payment with a transmittal form listing attachments and recording appropriate information about the application.
- F. General Contractor Certification Upon Application For Payment: Refer to attached Exhibits in Contract.
- G. Initial Application for Payment: Administrative actions and submittals that must precede the first Application for Payment include the following:
1. List of subcontractors. (Required at pre-construction conference.)
 2. Schedule of Values.
 3. Contractor's Final Project Schedule to be created in MS Project or equivalent format. (Required at pre-construction conference.)
 4. Certificates of insurance and insurance policies. (Required prior to contract award.)
 5. Performance and payment bonds. (Required prior to contract award.)
 6. Section 3 Work Plan, for projects whose contract value is five hundred thousand dollars (\$500,000) or higher.
 7. Intent to Pay Prevailing Wages must be filed with L&I.
 8. Contractor to provide Owner with initial Cash Flow Projections. Cash Flow Projection needs to reflect Work as detailed in Final Project Schedule.
- H. **All** Application for Payments will be reviewed for completion and correctness, including reasons outlined in A201-2017 General Conditions.
- I. Application for Payment at Substantial Completion: After Owner issues the Certificate of Substantial Completion, submit an Application for Payment showing one hundred (100%) percent completion for portion of the Work claimed as substantially complete.
1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.

2. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.

J. Final Payment Application: Administrative actions and submittals that must precede or coincide with submittal of the final Application for Payment include the following (refer to Article 9.10 in AIA A201-2017 General Conditions:

1. Completion of Project closeout requirements.
2. Completion of Items specified.
3. Ensure that unsettled claims will be settled.
4. Ensure that incomplete Work is not accepted and will be completed without undue delay.
5. Transmittal of required Project construction records to the Owner.
6. Proof that fees and similar obligations were paid.
7. Removal of temporary facilities and services.
8. Removal of surplus materials, rubbish and similar elements.
9. Operations and Maintenance Manuals
10. Record Drawings (i.e. As-built drawings, redline drawings)
11. Final Affidavits of Wages Paid filed with L&I.

1.6 SPECIAL PAYMENT REQUIREMENTS (Not Used)

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION (Not Used)

END OF SECTION 01 2900

SECTION 01 3100
PROJECT MANAGEMENT AND COORDINATION

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. General project coordination procedures.
 - 2. Coordination Drawings.
 - 3. Project meetings.
 - 4. Requests for Information (RFIs).
- B. See Division 01 Section "Execution" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.

1.3 DEFINITIONS

- A. RFI: Request from Contractor seeking interpretation or clarification of the Contract Document.

1.4 COORDINATION

- A. Coordination: Contractor's Responsibility to 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 with other contractors to ensure maximum accessibility for required maintenance, service and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors 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 Final Project 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. Pre-installation conferences.
7. Project closeout activities.

1.5 PROJECT MEETINGS

- A. General: Contractor is responsible for scheduling and conducting meetings and conferences at Project site, unless otherwise indicated.
 1. Attendees: Inform participants, others who are involved and individuals whose presence is required, of date and time of each meeting. Notify Owner of scheduled meeting dates and times.
 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
 3. Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned; send the electronic version of the meeting minutes to the Project Manager and the Project Engineer, within three (3) business days of the meeting.

- B. Pre-construction Conference: A pre-construction conference shall be scheduled before starting construction. Owner to hold the conference at Project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.
 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.
 2. Agenda: Owner to discuss items of significance that could affect progress, including the following:
 - a. Scope of Work.
 - b. Contract Start and End Dates.
 - c. Authority of Owner's Personnel.
 - d. Davis Bacon/Prevailing Wage Certified Payroll Reports/Labor Relations and Section 3.
 - e. Insurance Certificate, Endorsement and Performance and Payment Bonds.
 - f. General Requirements/Special Conditions.
 - g. Final Project Schedule, including Phasing.
 - h. Easements, Permits, Lines & Grades.
 - i. Contractor's Superintendent.
 - j. Subcontractor List.
 - k. Safety Plan (see attachment at end of this section).
 - l. Tests, Samples and Observations.
 - m. Progress Meetings and Reports.
 - n. Applications and Certificates of Payment, and Retention.
 - o. Progress Payments.
 - p. Change Orders.
 - q. Warranty Requirements.
 - r. Submittals.
 - s. Temporary and Storage Facilities, Staging Areas and Jobsite Security.
 - t. Clean-up and Trash Removal.
 - u. Salvage of Materials and Spare Materials.
 - v. Record Drawings.
 - w. Substantial Completion, Final Payment and Retainage.
 - x. Recycling and Energy Conservation.

- y. Minutes: The Owner will record and distribute Pre-construction meeting minutes via email.
- C. Progress Meetings: The Contractor will conduct progress meetings at weekly intervals. (refer to Article 3.1.4 of General Conditions).
- 1. Attendees: In addition to representatives of Owner and the Contractor, each 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 conference 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 Final Project 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 Final Project 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) Contractor shall provide a short term look-ahead schedule for presentation and review at each progress meeting.
 - 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) Work hours.
 - 10) Hazards and risks.
 - 11) Progress cleaning.
 - 12) Quality and work standards.
 - 13) Status of correction of deficient items.
 - 14) Field observations.
 - 15) RFIs.
 - 16) Status of proposal requests.
 - 17) Pending changes.
 - 18) Status of Change Orders.
 - 19) Pending claims and disputes.
 - 20) Documentation of information for payment requests.
 - 21) Safety
 - 22) Section 3 compliance and status
 - 3. Minutes: Contractor will record the meeting minutes.
 - 4. Reporting: Contractor will email the minutes to all concerned prior to the meeting and will distribute written copies of the minutes of the meeting to each party present and to parties who should have been present.
 - a. Schedule Updating: Revise Contractor's Two (2)-Week Look Ahead Schedule after each progress meeting. This schedule will be discussed in

each progress meeting. Issue revised schedule concurrently with the report of each meeting.

- b. Contractor's weekly reports will consist of five (5) daily reports, each reflecting the preceding five (5) days. These reports will be sent electronically to the Owner on a schedule that will be determined at the Pre-Construction Meeting or at each progress meeting.

1.6 REQUESTS FOR INFORMATION (RFIs)

- A. Procedure: Immediately on discovery of the need for interpretation of the Contract Documents, and if not possible to request interpretation at Project meeting, prepare and submit an RFI in the form specified.
 1. RFIs generated from subcontractor or supplier of the Contractor must be routed through the General Contractor.
 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
 3. If a suggestion can be determined or derived at by the initiator of the RFI, it is required the suggestion be supplied with the submitted RFI. If no suggestion is given where one is possible, the RFI will be returned as incomplete.
- B. Content of the RFI: Include a detailed, legible description of item needing interpretation and the following:
 1. Project name and number.
 2. RFI Subject.
 3. Date.
 4. Name of Contractor.
 5. Name of Architect.
 6. RFI number, numbered sequentially.
 7. Specification Section number and title and related paragraphs, as appropriate.
 8. Drawing number and detail references, as appropriate.
 9. Field dimensions and conditions, as appropriate.
 10. Contractor's suggested solution(s). If Contractor's solution(s) impact the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
 11. Contractor's signature.
 12. Attachments: Include drawings, descriptions, measurements, photos, product data, shop drawings and other information necessary to fully describe items needing interpretation.
- C. Hard-Copy RFIs: Form established by Contractor's Project Management system.
 1. Identify each page of attachments with the RFI number and sequential page number.
- D. Owner's Action: Owner will review each RFI, determine action required and return it. Allow five (5) working days for Owner's acknowledgement of each RFI.
 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 Owner's actions on submittals.
 - f. Incomplete RFIs or RFIs with numerous errors.

2. Owner's action may include a request for additional information, in which case Owner's time for response will start again.
 3. Owner's action may include architect and/or engineer recommendation or approval of proposed solution.
 4. Owner'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 Order Request according to General Conditions.
 - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Owner in writing within five (5) days of receipt of the RFI response.
- E. On receipt of Owner's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Owner within three (3) days if Contractor disagrees with response.
- F. Contractor RFI Log: Prepare, maintain and submit a tabular log of RFIs organized by the RFI number. Submit log weekly. 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's response was received.
 8. Identification of related Minor Change in the Work, Construction Change Directive and Change Order Request, as appropriate.
- PART 2 PRODUCTS (Not Used)
- PART 3 EXECUTION (Not Used)

GENERAL CONTRACTOR SITE SAFETY PLAN CHECKLIST

Instructions: Please indicate whether or not your Site Safety Plan contains the following provisions.

Contractors: Site Safety Plan Evaluation

Yes	No	N/A	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. Will your company have a written, established, supervised and enforced site safety plan for the project? <i>(The site safety plan must be presented before starting work)</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. Does the site safety plan include an orientation and weekly safety meetings that show your employees and other subcontractors what they need to know to perform their job assignments safely?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. Does the site safety plan describe how and when to report on-the-job injuries?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4. Does the site safety plan identify on-site available 1st Aid / CPR trained personnel, readily accessible first-aid and and/or access to the nearest clinic or hospital on job site?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5. Does the site safety plan identify what to do in an emergency, including how to exit the workplace?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6. Does the site safety plan explain how employees and other subcontractors report unsafe conditions and practices?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7. Does the site safety plan describe the required personal protective equipment (PPE) and the proper use and care of the PPE?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8. Is there an on-site Haz-com Program that identifies hazardous materials (Asbestos, Lead) or chemicals including instruction about the safe use and storage?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9. Does the site safety plan identify the designated representative responsible for job-site Safety?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10. Does the site safety plan describe who is responsible for performing and recording regular periodic site reviews, and inspections for your employees and subcontractors?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11. Does the site safety plan describe programs related to housekeeping and jobsite safety?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12. Does the site safety plan include a job-site specific written fall protection plan covering potential falls hazards and protections?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13. Does the site safety plan describe electrical and or power generation controls?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14. Does the site safety plan have provisions for trenching /excavations and/or confined space?

Notes:

END OF SECTION 01 3100

SECTION 01 3200
CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
1. Contractor's Final Project Schedule.
 2. Submittals Schedule (refer to Article 3.10.2 in General Conditions AIA A201-2017).
 3. Daily construction reports.

1.3 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 Final Project Schedule consume time and resources.
1. Critical activities are activities on the critical path. They 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.
- E. Fragnet: A partial or fragmentary network that breaks down activities into smaller activities for greater detail.
- F. Major Area: A story of construction, a separate building or a similar significant construction element.

1.4 SUBMITTALS

- A. Submittals Schedule: Submit one (1) electronic copy of schedule to the Owner. Arrange the following information in a tabular format
 1. Scheduled date for first submittal.
 2. Specification Section number and title.
 3. Submittal category (action or informational).
 4. Name of subcontractor (if applicable).
 5. Description of the Work covered.
 6. Scheduled date for Architect's final release or approval.
- B. Contractor's Final Project Schedule: Submit one (1) electronic copy and one (1) hard copy of initial schedule to the Owner. The hard copy should be large enough to show entire schedule for entire construction period.

1.5 COORDINATION

- A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.
- B. Coordinate Contractor's Final Project Schedule with the Schedule of Values, list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.
 1. Secure time commitments for performing critical elements of the Work from parties involved.
 2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

PART 2 PRODUCTS

2.1 SUBMITTALS SCHEDULE

- A. Preparation: Submit a schedule of submittals to the Owner, arranged in chronological order by dates required by Final Project Schedule. Include time required for review, resubmittal, ordering, manufacturing, fabrication and delivery when establishing dates.
 1. Coordinate Submittals Schedule with list of subcontracts, the Schedule of Values, and Contractor's Final Project Schedule.
 2. Submit concurrently with the first complete submittal of Contractor's Final Project Schedule.

2.2 CONTRACTOR'S FINAL PROJECT SCHEDULE, GENERAL (refer to Article 3.10.1 in the General Conditions AIA A201)

- A. Contractor to provide a baseline, cost-loaded schedule in MS Project or Primavera to the Owner's Representative one (1) day **prior** to the weekly project meeting. Contractor is to update the schedule weekly.
- B. Time Frame: Extend schedule from date established for commencement of the Work to date of Substantial Completion as set by the date of Notice to Proceed.

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.
- C. Activities: Treat each story or separate area as a separate numbered activity for each principal element of the Work. Comply with the following:
1. Activity Duration.
 2. Procurement Activities: Include procurement process activities for long lead items and major items as separate activities in schedule.
 - a. 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 Division 01 Section "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's Final Project Schedule with Submittals Schedule.
 4. Startup and Testing Time: Include not less than ten (10) 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.
- D. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in Final Project 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 Final Project 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.
- E. Milestones: Include milestones indicated in the Contract Documents in Final Project Schedule, including, but not limited to, the Notice to Proceed, Substantial Completion and Final Completion.
- F. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis using fragnets to demonstrate the effect of the proposed change on the overall project schedule.

2.3 CONTRACTOR'S FINAL PROJECT SCHEDULE (GANTT CHART)

- A. Gantt-Chart Schedule: Submit to the Owner a comprehensive, fully developed, horizontal Gantt-chart-type, Contractor's Final Project Schedule within fourteen (14) calendar days of date after Letter of Award. Base schedule on the Preliminary Construction Schedule and whatever updating and feedback was received since the start of Project. The Gantt-Chart Final Project Schedule can be either in MS Project or equivalent format.
- 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 (3) months or longer to complete, indicate an estimated completion percentage in ten (10%) percent increments within time bar.

PART 3 EXECUTION

3.1 CONTRACTOR'S FINAL PROJECT SCHEDULE

- A. Contractor's Final Project Schedule Updating: At two (2) week intervals, update schedule to reflect actual construction progress and activities. Issue schedule three (3) days 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 Actual Completion percentage for each activity.
- B. Distribution: Distribute electronic copies of approved schedule to 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 3200

SECTION 01 3300 SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples and other submittals.
- B. Related Sections:
 - 1. See Division 01 40 00 Section "Quality Requirements" for submitting test and inspection reports and for mockup requirements.
 - 2. See Division 01 77 00 Section "Closeout Procedures" for submitting warranties.
 - 3. See Division 01 78 39 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
 - 4. See Division 01 78 23 Section "Operation and Maintenance Data" for submitting operation and maintenance manuals.

1.3 DEFINITIONS

- A. Action Submittals: Written and graphic information that requires Owner's responsive action.
- B. Informational Submittals: Written information that does not require Owner's responsive action. Submittals may be rejected for not complying with requirements.

PART 2 PRODUCTS

2.1 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements:
 - 1. Submit electronic submittals to Owner via email as PDF electronic files.
 - a. Owner will return annotated file. Annotate and retain one (1) copy of file as an electronic Project record document file.
- 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. Owner reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

- C. Processing Time: Allow enough time for submittal review, including time for resubmittals, as follows:
1. Time for review shall commence on Owner'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.
 2. Initial Review: Allow five (5) working days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Owner will advise Contractor when a submittal being processed must be delayed for coordination.
 3. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
 4. Resubmittal Review: Allow seven (7) working days for review of each resubmittal.
- D. Identification: Place a permanent label or title block on each submittal for identification.
1. Indicate name of firm or entity that prepared each submittal on label or title block.
 2. Provide a space approximately **4 by 5 inches** on label or beside title block to record Contractor's review and approval markings and action taken by Owner.
 3. Include the following information on label for processing and recording action taken:
 - a. Project name.
 - b. Date.
 - c. Name and address of Architect (if applicable).
 - d. Name and address of Contractor.
 - e. Name and address of subcontractor.
 - f. Name and address of supplier.
 - g. Name of manufacturer.
 - h. Submittal number or other unique identifier, including revision identifier.
 - 1) Submittal number shall use consecutively numbered submittals (001, 002, etc), followed by the Specification Section number, followed by a sequential number indicating version (e.g., 001-13 3300-0).
 - 2) Example: 001 – 01 1300 – 0
 - a) 001: Consecutively numbered submittals
 - b) 01 1300: Specification Section
 - c) 0: Version of submittal (0 = original submittal; 1 = first resubmittal; 2 = 2nd resubmittal; etc.)
 - i. Number and title of appropriate Specification Section.
 - j. Drawing number and detail references, as appropriate.
 - k. Location(s) where product is to be installed, as appropriate.
 - l. Other necessary identification.
- E. Deviations: Highlight, encircle or otherwise specifically identify deviations from the Contract Documents on submittals.
1. Substitution Requests.

- F. Additional Copies: Unless additional copies are required for final submittal, and unless Owner observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.
 - 1. Additional copies submitted for maintenance manuals will not be marked with action taken and will be returned.

- G. Transmittal: Package each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Owner will return submittals, without review, received from sources other than Contractor.
 - 1. Include Contractor's certification stating that information submitted complies with requirements of the Contract Documents.

- H. 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. Resubmit submittals until they are marked "Make Corrections Noted" or "No Exceptions Taken".

- I. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers and others as necessary for performance of construction activities. Show distribution on transmittal forms.
 - 1. Use for Construction: Use only final submittals with mark indicating "Make Corrections Noted" or "No Exceptions Taken".

2.2 CONTRACTOR'S USE OF ARCHITECT'S CAD FILES

- A. General: At Contractor's written request, copies of Architect's CAD files will be provided to Contractor for Contractor's use in connection with Project, subject to the following conditions:
 - 1. Release of CADD information will be restricted to the following categories:
 - a. Architectural floor plans.
 - b. Site plan.
 - c. Reflected ceiling plans.
 - d. Exterior elevations.
 - e. Stair sections.
 - 2. The CADD database will contain only the background information; the sheet numbers, sheet titles, room names and numbers, reference symbols, and other similar data will not be included.
 - 3. The CADD database will be generated on PC hardware with Autodesk AutoCAD software. Architect has the capability to develop CADD output to meet capabilities of all major platforms and major media types.
 - 4. When requesting CADD databases, specify the output form required.

PART 3 PRODUCTS

3.1 ACTION SUBMITTALS

- A. General: Prepare and submit to Owner, Action Submittals required by individual Specification Sections.

- B. 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 Owner.
 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.
- C. 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 printed 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 written recommendations.
 - b. Manufacturer's product specifications.

- c. Manufacturer's installation instructions.
 - d. Manufacturer's catalog cuts.
 - e. Wiring diagrams showing factory-installed wiring.
 - f. Printed performance curves.
 - g. Operational range diagrams.
 - h. Compliance with specified referenced standards.
 - i. Testing by recognized testing agency.
4. Number of Copies: Submit to Owner, four (4) copies of Product Data, unless otherwise indicated. Owner will return two (2) copies. Mark up and retain one (1) returned copy as a Project Record Document.
- D. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data, unless submittal of Architect's CAD Drawings is otherwise permitted.
1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Dimensions.
 - b. Identification of products.
 - c. Fabrication and installation drawings.
 - d. Roughing-in and setting diagrams.
 - e. Wiring diagrams showing field-installed wiring, including power, signal, and control wiring.
 - f. Shop-work manufacturing instructions.
 - g. Templates and patterns.
 - h. Schedules.
 - i. Notation of coordination requirements.
 - j. Notation of dimensions established by field measurement.
 - k. Relationship to adjoining construction clearly indicated.
 - l. Seal and signature of professional engineer if specified.
 - m. Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring.
 2. Sheet Size: Except for templates, patterns and similar full-size drawings, submit to Owner, Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 36 by 48 inches.
 3. Number of Copies: Submit to Owner, a minimum of three (3) opaque (bond) copies of each submittal. Submit additional copies as required for each consultant. Owner will return two (2) copies. At the sole discretion of the Owner electronic copies may be acceptable.
- E. Samples: Submit to Owner, 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 appropriate Specification Section.

3. 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.
4. 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 (1) full set of available choices where color, pattern, texture or similar characteristics are required to be selected from manufacturer's product line. Owner will return submittal with options selected.
5. 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 three (3) sets of Samples. Owner will retain two (2) Sample sets; remainder will be returned.
- F. Product Schedule or List: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location.
 1. Number of Copies: Submit a minimum of three (3) copies of product schedule or list, unless otherwise indicated. Submit additional copies for each consultant required to review the submittal. Owner will return two (2) copies.
- G. Submittals Schedule: Comply with requirements specified in the General Conditions of the Contract and Owner-Contractor Contract.
- H. Application for Payment: Comply with requirements specified in the Owner-Contractor Contract.
- I. Schedule of Values: Comply with requirements specified in the Owner-Contractor Contract. If needed, combine subcontract list in paragraph below with product list above. Subcontract list is required by General Conditions to be submitted as soon as practical after award of the Contract.
- J. 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.
 1. Number of Copies: Submit electronically to Owner, one (1) copy of subcontractor list, unless otherwise indicated.

3.2 INFORMATIONAL SUBMITTALS

- A. General: Prepare and submit Informational Submittals required by other Specification Sections.

1. Number of Copies: Submit to Owner, two (2) copies of each submittal, unless otherwise indicated. Owner will not return copies.
 2. Certificates and Certifications: Provide a notarized 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.
 3. Test and Inspection Reports: Comply with requirements specified in Division 01 40 Section "Quality Requirements."
- B. Coordination Drawings: Comply with requirements specified in Division 01 31 00 Section "Project Management and Coordination."
- C. Contractor's Final Project Schedule: Comply with requirements specified in the General Conditions of the Contract, and Owner-Contractor Contract.
- D. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of architects and Owners, and other information specified.
- E. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification (WPS) and Procedure Qualification Record (PQR) on AWS forms. Include names of firms and personnel certified.
- F. Installer Certificates: Prepare 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.
- G. Manufacturer Certificates: Prepare written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- H. Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- I. Material Certificates: Prepare written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- J. Material Test Reports: Prepare 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.
- K. Product Test Reports: Prepare written reports indicating 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.
- L. Research/Evaluation Reports: Prepare written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project.

- M. Pre-construction Test Reports: Prepare 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.
- N. Compatibility Test Reports: Prepare 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.
- O. Field Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, 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.
- P. Maintenance Data: Prepare written and graphic instructions and procedures for operation and normal maintenance of products and equipment. Comply with requirements specified in Division 01 78 23 Section "Operation and Maintenance Data."
- Q. Design Data: Prepare 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.
- R. Manufacturer's Instructions: Prepare written or published information that documents manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address and telephone number of manufacturer.
- S. Manufacturer's Field Reports: Prepare written information documenting factory-authorized service representative's tests and inspections. Include the following, as applicable:
 - 1. Statement on condition of substrates and their acceptability for installation of product.
 - 2. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 - 3. Results of operational and other tests and a statement of whether observed performance complies with requirements.
- T. Insurance Certificates and Bonds: Prepare written information indicating current status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits of coverage, amounts of deductibles, if any, and term of the coverage.
- U. Material Safety Data Sheets (MSDSs): Submit information directly to Owner.
 - 1. Architect will not review submittals that include MSDSs and will return them for resubmittal.

3.3 DELEGATED DESIGN

- 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 Owner.
- B. Delegated-Design Submittal: In addition to Shop Drawings, Product Data, and other required submittals, electronically submit three (3) copies of a statement, 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.
 - 2. If submittal has a wet stamp, then send three (3) hard copies, with the wet stamp to Owner for approval. Owner will return one (1) copy to Contractor.

PART 4 EXECUTION

4.1 CONTRACTOR'S REVIEW

- A. 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.

4.2 OWNER'S ACTION

- A. Action Submittals: Owner will review each submittal, make marks to indicate corrections or modifications required, and return it. Owner will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken.
- B. Informational Submittals: Owner will review each submittal and will not return it, or will return it if it does not comply with requirements. Owner will forward each submittal to appropriate party.
- C. Partial submittals are not acceptable, will be considered nonresponsive, and will be returned without review.
- D. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

END OF SECTION 01 3300

SECTION 01 4000 QUALITY REQUIREMENTS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This 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 quality-control procedures that facilitate compliance with the Contract Document requirements.
 - 2. Requirements for Contractor to provide quality-assurance and quality-control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.
- C. See Divisions 02 through 33 Sections for specific test and inspection requirements, if applicable. Not all Divisions will be used.

1.3 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions and procedures performed before and during execution of the Work to guard against defects and deficiencies and 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 Owner.
- C. Mockups: Full-size, physical assemblies that are constructed on-site. Mockups are used to verify selections made under sample submittals, to demonstrate aesthetic effects and, where indicated, qualities of materials and execution, and to review construction, coordination, testing or operation; they are not Samples. Approved mockups establish the standard by which the Work will be judged.
- D. Pre-construction Testing: Tests and inspections that are performed specifically for the 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 industry standards.
- F. Source Quality-Control Testing: Tests and inspections that are performed at the source, i.e., 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 Lower Tier Subcontractor, to perform a particular construction operation, including installation, erection, application and similar operations.
 - 1. Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to tradespeople of the corresponding generic name.
- J. Experienced: When used with an entity, "experienced" means having successfully completed a minimum of two (2) previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

1.4 CONFLICTING REQUIREMENTS

- A. General: If compliance with two (2) 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 uncertainties and requirements that are different, but apparently equal, to Owner 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 Owner for a decision before proceeding.

1.5 TESTING SUBMITTALS

- A. Qualification Data: For testing agencies, as prescribed by Contract, but not provided by Owner shall 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.
- B. Reports: Prepare and electronically submit to the Owner certified written reports that 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 re-testing and re-inspecting.
- C. 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. 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.
- C. 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.
- D. 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.
- 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 is similar to those indicated for this Project in material, design and extent.
- F. Specialists: Certain sections of the Specifications 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. Requirement for specialists shall not supersede building codes and regulations governing the Work.

- 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 548; 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. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design and extent to those indicated for this Project.
- I. Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:
1. Build mockups in location and of size indicated or, if not indicated, as directed by Owner.
 2. Notify Owner seven (7) calendar days in advance of dates and times when mockups will be constructed.
 3. Demonstrate the proposed range of aesthetic effects and workmanship.
 4. Obtain Owner's approval of mockups before starting work, fabrication or construction.
 5. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
 6. Demolish and remove mockups when directed, unless otherwise indicated.
- J. Laboratory Mockups: Comply with requirements of pre-construction testing and those specified in individual Sections in Divisions 02 through 33.

1.7 QUALITY CONTROL

- A. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
1. Owner will furnish Contractor with names, addresses and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.
 2. Costs for retesting and re-inspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor.
- B. Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, 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 twenty-four 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, electronically submit a certified written report, in duplicate, of each quality-control service to the Owner.
 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.
- C. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Division 01 33 00 Section "Submittal Procedures."
- D. Re-testing/Re-inspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including re-testing and re-inspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- E. Testing Agency Responsibilities: Cooperate with Owner and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
1. Notify Owner 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 on-site tests will be 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. Electronically submit to the Owner 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.
- F. 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.

- G. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and quality-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.

1.8 SPECIAL TESTS AND INSPECTIONS

- A. Special Tests and Inspections: Owner will engage a qualified special inspector to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of Owner, and as follows:
 - 1. Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviewing the completeness and adequacy of those procedures to perform the Work.
 - 2. Notifying Owner and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
 - 3. Submitting a certified written report of each test, inspection, and similar quality-control service to Owner with copy to Contractor and to authorities having jurisdiction.
 - 4. Electronically submitting to the Owner a final report of special tests and inspections, which includes a list of unresolved deficiencies, at Substantial Completion.
 - 5. Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.
 - 6. Re-testing and re-inspecting corrected work.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

3.1 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. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible.
 - 2. Comply with the Contract Document requirements for Division 01 73 29 Section "Cutting and Patching."
- 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 4000

SECTION 01 5000
TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 73 00 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes requirements for temporary utilities, support facilities, and security and protection facilities.
- B. See Division 01 Section "Execution" for progress cleaning requirements.
- C. See Divisions 02 through 33 Sections for temporary heat, ventilation, and humidity requirements for products in those Sections. Not all Sections will be used

1.3 DEFINITIONS

- A. Permanent Enclosure: As determined by Architect, permanent or temporary roofing is complete, insulated and weathertight; exterior walls are insulated and weathertight; and all openings are closed with permanent construction or substantial temporary closures.

1.4 USE CHARGES

- A. General: Cost or use charges for temporary facilities shall be included in the Contract Sum. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Owner's construction forces, Architect, testing agencies and authorities having jurisdiction.
- B. Water Service from Existing System: Water from Owner's existing water system is available for use with approval of Owner's Representative. Provide connections and extensions of services as required for construction operations. Contractor must notify Owner forty-eight (48) hours before use of water service.
- C. Electric Power Service from Existing System: Contractor is responsible for supplying power service and distribution as required for construction operations, unless other arrangements are made with approval of Owner's Representative.

1.5 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.

1.6 PROJECT CONDITIONS

- A. Temporary Use of Existing Permanent Facilities: Contractor shall assume responsibility for operation, maintenance and protection of each existing permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.
- B. Conditions of Use: The following conditions apply to use of temporary services and existing facilities by all parties engaged in the Work:
 - 1. Keep temporary services and existing facilities clean and neat.
 - 2. Relocate temporary services as required by progress of the Work.
 - 3. Provide temporary keys and lock cores throughout duration of Contractor's occupancy of Owner's space. Contractor to provide Owner's Representative with temporary construction keys matching construction cores installed for access.
 - a. When Contractor is given keys to KCHA property, Contractor will claim responsibility for the keys by signing for keys acquired. If Contractor loses keys, Contractor is responsible for rekeying all locks associated with lost key. Contractor is responsible for returning keys back to Owner's Representative when Work is completed.

PART 2 PRODUCTS

2.1 TEMPORARY FACILITIES

- A. Field Offices, General: Prefabricated or mobile units with serviceable finishes, temperature controls and foundations adequate for normal loading.
- B. Storage and Fabrication Sheds: Provide sheds sized, furnished and equipped to accommodate materials and equipment for construction operations.
- C. Contractor is responsible for security of Temporary Facilities.

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 testing agency acceptable to authorities having jurisdiction, and marked for intended use.
 - 3. Permanent HVAC System: If Owner authorizes use of permanent HVAC system for temporary use during construction, provide filter with MERV of 13 at each return air grille in system and remove and replace at end of construction.
- C. Self-Contained Toilet Units: Single-occupant units of chemical, aerated re-circulation, or combustion type; vented; fully-enclosed with a glass-fiber-reinforced polyester shell or similar nonabsorbent material.

- D. Drinking-Water Fixtures: Containerized, tap-dispenser, bottled-water, drinking-water units, including paper cup supply.
 - 1. Where power is accessible, provide electric water coolers to maintain dispensed water temperature at 45 to 55 degrees F.
- E. Electrical Outlets: Properly configured, NEMA-polarized outlets to prevent insertion of 110-to-120-V plugs into higher-voltage outlets; equipped with ground-fault circuit interrupters, reset button and pilot light.
- F. Power Distribution System Circuits: Where permitted, and overhead and exposed for surveillance, wiring circuits, not exceeding 125-V AC, 20-A rating, and lighting circuits may be nonmetallic sheathed cable.

PART 3 EXECUTION

3.1 INSTALLATION, GENERAL

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

3.2 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. Provide Owner with seventy-two (72) hour notice if disturbance is to occur to site staff or residents.
- B. 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.
- C. Sanitary Facilities: Provide temporary toilets, wash facilities and drinking water for use by construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation and maintenance of fixtures and facilities.
 - 1. Toilets: Use of Owner's existing toilet facilities will be permitted with Owner's approval, as long as facilities are cleaned and maintained daily. At Substantial Completion, restore these facilities to condition existing before initial use.
- D. Heating and Cooling: Provide temporary heating and cooling required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed.

1. Maintain a minimum temperature of 50 degrees F in permanently enclosed portions of building for normal construction activities, and 65 degrees F for finishing activities and areas where finished Work has been installed.
 2. Isolation of Work Areas in Occupied Facilities: Prevent dust, fumes and odors from entering occupied areas.
- E. Ventilation and Humidity Control: Provide temporary ventilation required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce ambient condition required and minimize energy consumption.
- F. Electric Power Service: Provide electric power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations.
1. Connect temporary service to Owner's existing power source, as directed by Owner after receiving approval by Owner's Representative.
- G. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections and traffic conditions.
1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.

3.3 SUPPORT FACILITIES INSTALLATION

- A. 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 Division 01 73 00 Section "Execution" for progress cleaning requirements. Contractor shall not use Owner's waste receptacles for any disposal.
- B. Parking: Use designated areas of Owner's existing parking areas for construction personnel upon Owner's approval.

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 in ways and by methods that comply with environmental regulations and that minimize possible air, waterway and subsoil contamination or pollution or other undesirable effects.
- C. Security Enclosure and Lockup: Install substantial temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft and similar violations of security.
- D. Barricades, Warning Signs, and Lights: Comply with Owner's instructions for erecting structurally adequate barricades, including warning signs and lighting.

- E. Temporary Egress: Maintain temporary egress from existing occupied facilities as indicated and as required by Owner.
- F. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations and similar activities. Provide temporary weathertight enclosure for building exterior.
 - 1. Where heating or cooling is needed and permanent enclosure is not complete, insulate temporary enclosures.
- G. Temporary Partitions: Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by tenants from fumes and noise.
 - 1. Construct dustproof partitions with two (2) layers of 6-mil polyethylene sheet on each side. Overlap and tape full length of joints.
 - 2. Where fire-resistance-rated temporary partitions are indicated or are required by authorities having jurisdiction, construct partitions according to the rated assemblies.
 - 3. Seal joints and perimeter.
 - 4. Protect air-handling equipment.
 - 5. Provide walk-off mats at each entrance through temporary partition.
 - 6. Dust Control/Air handlers
- H. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.
 - 1. Prohibit smoking on Owner's property.
 - 2. Supervise welding operations, combustion-type temporary heating units and similar sources of fire ignition according to requirements of authorities having jurisdiction.

3.5 OPERATION, TERMINATION AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. 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 twenty-four (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, clean and renovate permanent facilities used during construction period. Comply with final cleaning requirements specified in Division 01 77 00 Section "Closeout Procedures."

END OF SECTION 01 5000

SECTION 01 6000 PRODUCT REQUIREMENTS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This 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; product substitutions; and comparable products.
- B. See Division 01 77 00 Section "Closeout Procedures" for submitting warranties for Contract closeout.
- C. See Divisions 02 through 33 Sections for specific requirements for warranties on products and installations specified to be warranted. Not all Sections will be used.

1.3 DEFINITIONS

- A. Products: Items purchased 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, except that products consisting of recycled-content materials are allowed, unless explicitly stated otherwise. Products salvaged or recycled from other projects are not considered new products.
 - 3. Comparable Product: Product that is demonstrated and approved through submittal process, or where indicated as a product substitution, 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. Substitutions: Changes in products, materials, equipment and methods of construction from those required by the Contract Documents and proposed by Contractor.
- C. Basis-of-Design Product Specification: Where a specific manufacturer's product is named and accompanied by the words "basis of design," 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 other named manufacturers.

1.4 SUBMITTALS

- A. Substitution Requests: Electronically submit three (3) copies of each request for consideration to the Owner. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
1. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Statement indicating why specified material or product cannot be provided.
 - b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, which will be necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect and specific features and requirements indicated.
 - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - e. Samples, where applicable or requested.
 - f. List of similar installations for completed projects with project names and addresses and the names and addresses of Architects and Owners.
 - g. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 - h. Research/evaluation reports evidencing compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction.
 - i. Detailed comparison of Contractor's Final Project Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating lack of availability or delays in delivery.
 - j. Cost information, including a proposal of change, if any, in the Contract Sum.
 - k. Contractor's certification that proposed substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.
 - l. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
 2. Owner's Action: If necessary, the Owner will request additional information or documentation for evaluation within five (5) calendar days of receipt of a request for substitution. Owner will notify Contractor of acceptance or rejection of proposed substitution within ten (10) calendar days of receipt of request, or five (5) calendar days of receipt of additional information or documentation, whichever is later.
 - a. Form of Acceptance: Signed and Approved Substitution Request Form.

- B. Basis-of-Design Product Specification Submittal: Comply with requirements in Division 01 Section "Submittal Procedures." Show compliance with requirements.

1.5 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two (2) or more products for use on Project, product selected shall be compatible with products previously selected, even if previously selected products were also options.

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store and handle products using means and methods that will prevent damage, deterioration and loss, including theft. 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 ensure compliance with the Contract Documents and to ensure 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. Store cementitious products and materials on elevated platforms.
5. Store foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
6. Comply with product manufacturer's written instructions for temperature, humidity, ventilation and weather-protection requirements for storage.
7. Protect stored products from damage and liquids from freezing.

1.7 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: Pre-printed written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.

2. Special Warranty: Written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by manufacturer's warranty or to provide more rights for Owner.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Electronically submit a draft for approval before final execution to the Owner.
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 appropriate form properly executed.
 3. Refer to Divisions 2 through 33 Sections for specific content requirements and particular requirements for submitting special warranties. Not all Sections will be used.
- C. Submittal Time: Comply with requirements in Division 01 Section "Closeout Procedures."

PART 2 PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, that 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," Owner will make selection.
 5. Where products are accompanied by the term "match sample," sample to be matched is Owner's.
 6. Descriptive, performance and reference standard requirements in the Specifications establish "salient characteristics" of products.
- B. Product Selection Procedures:
1. Products: Where Specifications include a list of names of both products and manufacturers, provide one (1) of the products listed or equal product that complies with requirements.
 2. Manufacturers: Where Specifications include a list of manufacturers' names, provide a product by one (1) of the manufacturers listed or equal manufacturer that complies with requirements.
 3. Available Products: Where Specifications include a list of names of both products and manufacturers, provide one (1) of the products listed, or a equal product. Comply with provisions in Part 2 "Product Substitutions" Article for consideration of an unnamed "or Equal" product.

4. Available Manufacturers: Where Specifications include a list of manufacturers, provide a product by one (1) of the manufacturers listed, or an unnamed manufacturer, that complies with requirements. Comply with provisions in Part 2 "Product Substitutions" Article for consideration of an unnamed manufacturer.
5. Product Options: Where Specifications indicate that sizes, profiles and dimensional requirements on Drawings are based on a specific product or system, provide the specified product or system. Comply with provisions in Part 2 "Product Substitutions" Article for consideration of an unnamed product or system.
6. Basis-of-Design Product: Where Specifications name a product and include a list of manufacturers, provide the specified product or a comparable product by one (1) of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions and other characteristics that are based on the product named. Comply with provisions in Part 2 "Product Substitutions" Article for consideration of an unnamed product by the other named manufacturers.
7. Visual Matching Specification: Where Specifications require matching an established Sample, select a product that complies with requirements and matches Owner's sample. Owner's decision will be final on whether a proposed product matches.
 - a. If no product available within specified category matches and complies with other specified requirements, comply with provisions in Part 2 "Product Substitutions" Article for proposal of product.
8. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's colors, patterns and textures" or a similar phrase, select a product that complies with other specified requirements.
 - a. Standard Range: Where Specifications include the phrase "standard range of colors, patterns, textures" or similar phrase, Owner will select color, pattern, density or texture from manufacturer's product line that does not include premium items.
 - b. Full Range: Where Specifications include the phrase "full range of colors, patterns, textures" or similar phrase, Owner will select color, pattern, density or texture from manufacturer's product line that includes both standard and premium items.

2.2 PRODUCT SUBSTITUTIONS

- A. Timing: Owner will consider requests for substitutions if received within sixty (60) days after the Notice to Proceed. Requests received after that time may be considered or rejected at discretion of Owner. .
- B. Conditions: Owner will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Owner will return requests without action, except to record noncompliance with these requirements:
 1. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner and similar considerations.
 2. Requested substitution does not require extensive revisions to the Contract Documents.

3. Requested substitution is consistent with the Contract Documents and will produce indicated results.
4. Substitution request is fully documented and properly submitted.
5. Requested substitution will not adversely affect Contractor's Final Project Schedule.
6. Requested substitution has received necessary approvals of authorities having jurisdiction.
7. Requested substitution is compatible with other portions of the Work.
8. Requested substitution has been coordinated with other portions of the Work.
9. Requested substitution provides specified warranty.

PART 3 EXECUTION (Not Used)

END OF SECTION 01 6000

**SECTION 01 7300
EXECUTION**

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes general procedural requirements governing execution of the Work including, but not limited to, the following:
 - 1. Construction layout.
 - 2. General installation of products.
 - 3. Progress cleaning.
 - 4. Starting and adjusting.
 - 5. Protection of installed construction.
 - 6. Correction of the Work.
- B. See Division 01 Section "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, and final cleaning.

1.3 SUBMITTALS

- A. Not Applicable

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

3.1 EXAMINATION

- A. Existing Conditions: The existence and location of site improvements, utilities and other construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of mechanical and electrical systems and other construction affecting the Work. Notify Owner of any discrepancies between plans and actual conditions on site.
 - 1. Before construction, verify the location and points of connection of utility services.
- B. Acceptance of Conditions: Examine substrates, areas and conditions, with Installer or Applicator and Owner present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
 - 1. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.

2. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
3. Examine walls, floors and roofs for suitable conditions where products and systems are to be installed.
4. Proceed with installation only after unsatisfactory conditions have been corrected and approved by Owner. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. 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.
- B. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- C. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to Owner, per Section 01 3100.
 1. It is the Contractor's responsibility to coordinate between the various Contract Documents, including the Drawings and Specifications, with neither superseding the other. In the event of conflicts or discrepancies among the Contract Documents, it is the Contractor's responsibility to seek clarification.
 2. Where conflicts and/or omissions have not been brought to the attention of the Owner, it is understood that the Contractor has made provisions in the bid for the most costly material or methods.

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 Owner promptly.
- B. General: Engage experienced layout engineers to lay out the Work using accepted surveying practices.
 1. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
 2. Inform installers of lines and levels to which they must comply.
 3. Check the location, level and plumb, of every major element as the Work progresses.
 4. Notify Owner when deviations from required lines and levels exceed allowable tolerances.

3.4 FIELD ENGINEERING

- A. Reference Points: Locate existing permanent benchmarks, control points and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.

3.5 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.
 - 4. Install materials in lengths that produce the minimum amount of joints.
- 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. Tools and Equipment: Do not use tools or equipment that produces harmful noise and dust levels. Refer to Dust Control in the Scope of Work.
- F. 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.
- G. Attachments: Provide blocking and attachment plates, 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. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Owner.
 - 2. Allow for building movement, including thermal expansion and contraction.
 - 3. 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.
- H. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, submit proposed joint layout, for Owner's approval. Fit exposed connections together to form hairline joints.
 - 1. Use weather cuts, miters, back caulk as needed. Use lengths that minimize joints.
- I. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.
 - 1. If required, Contractor must submit MSDS for all products to be used onsite to Owner for approval. Owner shall have seven (7) calendar days to review and approve/disapprove of the product.

2. If required, Contractor must submit a weekly schedule detailing when and where approved products will be used on an hour-by-hour basis. This schedule must be submitted by 9:00 AM on Wednesday of the week prior to the scheduled work week.

3.6 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully in compliance with Section 01 7419 "Construction Waste Management and Disposal."
 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 2. Do not hold materials more than seven (7) calendar days during normal weather or three (3) calendar days if the temperature is expected to rise above 80 degrees F.
 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
 4. Do not use Owner receptacles.
 5. Recycle as outlined in Waste Management Plan in Section 01 7419.
- 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: Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.
- 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. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units and re-test.
- B. Adjust operating components for proper operation without binding. Adjust equipment for proper operation.
- C. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- D. Manufacturer's Field Service: If a factory-authorized service representative is required to inspect field-assembled components and equipment installation, comply with qualification requirements in Division 01 04 00 Section "Quality Requirements."

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.

3.9 CORRECTION OF THE WORK

- A. Repair or remove and replace defective construction. Restore damaged substrates and finishes. Comply with requirements in Division 01 73 29 Section "Cutting and Patching."
 - 1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials and properly adjusting operating equipment.
- B. Restore permanent facilities used during construction as well as landscapes and hardscapes to their original condition.
- C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
- D. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.
- E. Remove and replace chipped, scratched and broken glass or reflective surfaces.

END OF SECTION 01 7300

SECTION 01 7329 CUTTING AND PATCHING

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes procedural requirements for cutting and patching.
- B. See Divisions 02 through 33 Sections for specific requirements and limitations applicable to cutting and patching individual parts of the Work. Not all Sections will be used.

1.3 QUALITY ASSURANCE

- A. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio.
- B. 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.
- C. Miscellaneous Elements: Do not cut and patch miscellaneous elements or related 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.
- D. Visual Requirements:
 - 1. Unless indicated otherwise, patching, extending or matching shall be performed as necessary to make the Work complete, with all components matching and consistent.
 - 2. Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in Owner's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.
 - 3. Patching materials shall meet the requirements of the jurisdictional code authorities.
 - 4. All patching procedures shall be reviewed with the Owner prior to proceeding.

1.4 WARRANTY

- A. Existing Warranties: Remove, replace, patch and repair materials and surfaces cut or damaged during cutting and patching operations, by methods and with materials so as not to void existing warranties.

PART 2 PRODUCTS

2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials 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 match the visual and functional performance of in-place materials.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.
 - 1. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with in-place finishes or primers.
 - 2. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Temporary Support: Provide temporary support of Work to be cut.
- B. 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.
- C. Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- D. Cut, move or remove items as necessary for access to alterations and renovations work; replace and restore at completion.
- E. Contact the Owner when unsuitable materials not marked for removal - such as rotted wood, rusted metals and deteriorated concrete and masonry are discovered.
- F. Remove debris and abandoned items from area and from concealed spaces.
- G. Prepare surfaces and remove surface finishes to provide for proper installation of new work and new finishes.

3.3 PERFORMANCE

- A. General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time and complete without delay.

- B. 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. Provide appropriate dust control while cutting through surfaces. 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 as small as possible, neatly to 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. Excavating and Backfilling: Comply with requirements in applicable Division 31 and 33 Sections (Sections may not be used) where required by cutting and patching operations.
 5. Proceed with patching after construction operations requiring cutting are complete.
- C. 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 possible. Provide materials and comply with installation requirements specified in other Sections.
1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.
 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
 3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture and appearance. Remove in-place floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
 4. Ceilings: Patch, repair or rehang in-place ceilings as necessary to provide an even-plane surface of uniform appearance.
 5. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition.
- D. Trim existing doors as necessary to clear new floor finishes; refinish trimmed areas.
- E. Where existing items are indicated as cut or reconfigured, cap and finish all exposed edges to match the existing construction to remain. Provide new or relocated supports spaced to be consistent with the installation.
- F. Cleaning: Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty and similar materials.

END OF SECTION 01 7329

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

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

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

1.3 DEFINITIONS

- A. Construction Waste: All non-hazardous building and site materials or other non-hazardous solid waste resulting from construction, remodeling, renovation, repair or land-clearing operations. Construction waste includes packaging and material that is recycled, reused, salvaged or disposed as garbage.
- B. Demolition Waste: All non-hazardous building and site materials or other non-hazardous solid waste resulting from demolition or selective demolition operations.
- C. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
- D. Recycle: Recovery of demolition or construction waste for subsequent processing for the purpose of using the material in the manufacture of a new product.
 - 1. Source-Separated Recycling: The process of separating recyclable materials in separate containers as they are generated on the job-site. The separated materials are hauled directly to a recycling facility or transfer station.
 - 2. Co-mingled Recycling: The process of collecting mixed recyclable materials in one container on-site. The container is taken to a material recovery facility where materials are separated for recycling.
- E. Re-Use: Making use of a material without altering its form. Materials can be reused on-site or reused on other project off-site. Examples include, but are not limited to the following:
 - 1. Grinding of concrete for use as sub-base material.
 - 2. Chipping of land-clearing debris for use as mulch.

- F. Salvage: Recovery of demolition or construction waste and subsequent sale or re-use in another facility.
- G. Salvage and Re-use: Recovery of demolition or construction waste and subsequent incorporation into the Work.

1.4 PERFORMANCE GOALS

- A. General: Material from demolition projects shall be recycled or reused whenever practicable (RCW 39.04.135). Contractor to develop a waste management plan that results in end-of-Project rates for salvage/recycling of fifty (50%) percent by weight of total waste generated by the Work by one or a combination of the following:
 - 1. Salvage.
 - 2. Reuse.
 - 3. Source-separated Recycling.
 - 4. Co-mingled Recycling.
- B. Salvage/Recycle Goals: Owner's goal is to salvage and recycle as much non-hazardous demolition and construction waste as possible including the following materials:
 - 1. Cardboard.
 - 2. Clean dimensional wood.
 - 3. Metals: Material banding, stud trim, ductwork, piping, rebar, roofing, other trim, steel, iron, galvanized sheet steel, stainless steel, aluminum, copper, zinc, lead, brass, and bronze.
 - 4. Gypsum board.

1.5 SUBMITTALS

- A. Waste Management Plan: Submit three (3) copies of plan within seven (7) calendar days of date established for the Notice of Proceed.
- B. Waste Reduction Progress Reports: Electronically submit, concurrent with Final Application for Payment, the report to the Owner. Include separate reports for demolition and construction waste. Include the following information:
 - 1. Material category.
 - 2. Generation point of waste.
 - 3. Destination of waste.
 - 4. Total quantity of waste in tons.
 - 5. Quantity of waste salvaged, both estimated and actual in tons.
 - 6. Quantity of waste recycled, both estimated and actual in tons.
 - 7. Total quantity of waste recovered (salvaged plus recycled) in tons.
 - 8. Total quantity of waste recovered (salvaged plus recycled) as a percentage of total waste.
- C. Waste Reduction Calculations: Before request for Substantial Completion, electronically submit a copy of calculated end-of-Project rates for salvage, recycling, and disposal as a percentage of total waste generated by the Work to the Owner.
- D. Records of Donations: Indicate receipt and acceptance of salvageable waste donated to individuals and organizations. Indicate whether organization is tax exempt.

- E. Records of Sales: Indicate receipt and acceptance of salvageable waste sold to individuals and organizations. Indicate whether organization is tax exempt.
- F. Recycling and Processing Facility Records: Indicate receipt and acceptance of recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts and invoices. If waste is taken to a facility that landfills and recycles, include facility record of recycling rate for the period of construction.
- G. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts and invoices.

1.6 QUALITY ASSURANCE

- A. Regulatory Requirements: Conduct construction waste management activities in accordance with State of Washington RCW 70.95.240, Seattle Municipal Code Chapter 21.36 and all other applicable laws and ordinances.
- B. Review of the following publications and programs (request copies by calling King County Solid Waste Division at 206-477-4466)
 1. Construction Recycling Directory for Seattle/ King County.
 2. Contractors Guide: Save money and resources through job-site recycling and waste prevention.
 3. King County Solid Waste Division Report of Co-mingled Recycling Facilities (available at www.metrokc.gov/dnrp/swd/construction-recycling/comingled.asp)

1.7 WASTE MANAGEMENT PLAN

- A. General: Develop a plan consisting of waste identification, waste reduction work plan and cost/revenue analysis. Include separate sections in plan for demolition and construction waste. Indicate quantities by weight or volume, but use same units of measure throughout waste management plan.
- B. Waste Identification: Indicate anticipated types and quantities of demolition and construction waste generated by the Work. Include estimated quantities and assumptions for estimates.
- C. Waste Reduction Work Plan: List each type of waste and whether it will be salvaged, recycled or disposed of in landfill or incinerator. Include points of waste generation, total quantity of each type of waste, quantity for each means of recovery and handling and transportation procedures.
 1. Salvaged Materials for Reuse: For materials that will be salvaged and reused in this Project, describe methods for preparing salvaged materials before incorporation into the Work.
 2. Salvaged Materials for Sale: For materials that will be sold to individuals and organizations, include list of their names, addresses and telephone numbers.
 3. Salvaged Materials for Donation: For materials that will be donated to individuals and organizations, include list of their names, addresses and telephone numbers.

4. Recycled Materials: Include list of local receivers and processors and type of recycled materials each will accept. Include names, addresses and telephone numbers.
 5. Disposed Materials: Indicate how and where materials will be disposed of. Include name, address and telephone number of each landfill and incinerator facility.
 6. Handling and Transportation Procedures: Include method that will be used for separating recyclable waste including sizes of containers, container labeling and designated location on Project site where materials separation will be located.
- D. Cost/Revenue Analysis: Indicate total cost of waste disposal as if there was no waste management plan and net additional cost or net savings resulting from implementing waste management plan. Include the following:
1. Total quantity of waste.
 2. Estimated cost of disposal (cost per unit). Include hauling and tipping fees and cost of collection containers for each type of waste.
 3. Total cost of disposal (with no waste management).
 4. Savings in hauling and tipping fees that are avoided.
 5. Handling and transportation costs. Include cost of collection containers for each type of waste.
 6. Net additional cost or net savings from waste management plan.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

3.1 PLAN IMPLEMENTATION

- A. General: Implement waste management plan as approved by Owner. Provide handling, containers, storage, signage, transportation and other items as required to implement waste management plan during the entire duration of the Contract.
- B. Waste Management Coordinator: Contractor shall be responsible for implementing, monitoring, and reporting status of waste management work plan.
- C. Training: Train workers, subcontractors and suppliers on proper waste management procedures, as appropriate for the Work occurring at Project site.
 1. Distribute waste management plan to everyone concerned within one (1) day of submittal return. A hard copy should remain on site. Send the plan electronically to the Owner.
 2. Distribute waste management plan to entities when they first begin work on-site. Review plan procedures and locations established for salvage, recycling and disposal.
 3. The General Contractor will ensure that the waste plan is communicated to the crews and subcontractors on site. They will be informed of:
 - a. How materials should be separated, and why.
 - b. Where materials should go.
 - c. How often the materials will be collected and delivered to the appropriate facilities.
 - d. The importance of recycling, and KCHA's recycling goals for the project.

- D. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways and other adjacent occupied and used facilities.
 - 1. Designate and label specific areas on Project site necessary for separating materials that are to be salvaged, recycled, reused, donated and sold.
 - 2. Comply with Division 01 50 00 Section "Temporary Facilities and Controls" for controlling dust and dirt, environmental protection and noise control.
 - 3. Clearly label the recycling bins and waste containers on site.
 - 4. Post lists of recyclable and non-recyclable materials in many locations, in different languages.
 - 5. The General Contractor will provide feedback to the crew and subcontractors on the results of their efforts

- E. To the greatest extent possible, include in material purchasing agreements a waste reduction provision requesting that materials and equipment be delivered in packaging made of recyclable material, that they reduce the amount of packaging, that packaging be taken back for reuse or recycling, and to take back all unused product. Ensure that subcontractors require the same provisions in their purchase agreements.

3.2 SALVAGING DEMOLITION WASTE

- A. Salvaged Items for Reuse in the Work:
 - 1. Clean salvaged items.
 - 2. Pack or crate items after cleaning. Identify contents of containers.
 - 3. Store items in a secure area until installation.
 - 4. Protect items from damage during transport and storage.
 - 5. Install salvaged items to comply with installation requirements for new materials and equipment. Provide connections, supports and miscellaneous materials necessary to make items functional for use indicated.

- B. Salvaged Items for Sale and Donation: Not permitted on Project site.

- C. Salvaged Items for Owner's Use:
 - 1. Clean salvaged items.
 - 2. Pack or crate items after cleaning. Identify contents of containers.
 - 3. Store items in a secure area until delivery to Owner.
 - 4. Transport items to Owner's designated off-site storage area.
 - 5. Protect items from damage during transport and storage.

3.3 RECYCLING DEMOLITION AND CONSTRUCTION WASTE, GENERAL

- A. General: Recycle paper and beverage containers used by on-site workers.

- B. Recycling Receivers and Processors: The list below is provided for information only; available recycling receivers and processors include, but are not limited to, the following:
 - 1. Washington State Department of Ecology, Recycling, Northwest Region 425-649-7000.
 - 2. Industrial Materials Exchange (IMEX), Hazardous Waste Management Program, King County, Washington.

KING COUNTY HOUSING AUTHORITY
EASTRIDGE HOUSE FIRE MONITORING SYSTEM UPGRADE

3. The “Recycling Plus Program Manual” published by the Washington State Clean Washington Center can be used to develop a job site reduction program. The manual includes a job-site recycling worksheet and form, tips on waste reduction, and other technical assistance. The manual also includes sample language for waste reduction requirements for subcontractors’ agreements, as well as sample provision for a full-service recycling agreement.
 4. LEED Reference Guide, Construction Waste Management section.
 5. Recovery 1 is a resource recovery, recycling and research facility dedicated to developing sustainable waste management systems. www.recovery1.com or by phone at 800-949-5852.
 6. Total Reclaim offers a wide variety of innovative environmental services for management of electronics and other hard to handle materials, including fluorescent lamps, refrigerant gases and appliances. www.totalreclaim.com or by phone 206-343-7443.
 7. “Contractors’ Guide for Preventing Waste and Recycling”
<https://kingcounty.gov/~media/depts/dnrp/solid-waste/construction-recycling/documents/ConGuide.ashx?la=en>
 8. “Seattle/King County Construction Recycling Directory.”
<https://kingcounty.gov/depts/dnrp/solid-waste/programs/green-building/county-green-building.aspx>
- C. Recycling Incentives: Revenues, savings, rebates, tax credits and other incentives received for recycling waste materials shall accrue to Owner.
- D. Procedures: Separate recyclable waste from other waste materials, trash and debris. Separate recyclable waste by type at Project site to the maximum extent practical.
1. Provide appropriately marked containers or bins for controlling recyclable waste until they are removed from Project site. Include list of acceptable and unacceptable materials at each container and bin.
 - a. Inspect containers and bins for contamination and remove contaminated materials if found.
 2. Stockpile processed materials on-site without intermixing with other materials. Place, grade and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 3. Stockpile materials away from construction area. Do not store within drip line of remaining trees.
 4. Store components off the ground and protect from the weather.
 5. Remove recyclable waste off Owner's property and transport to recycling receiver or processor.

3.4 RECYCLING DEMOLITION WASTE

- A. Wood Materials: Sort and stack members according to size, type and length. Separate lumber, engineered wood products, panel products and treated wood materials.
- B. Metals: Separate metals by type.
1. Structural Steel: Stack members according to size, type of member and length.
 2. Remove and dispose of bolts, nuts, washers and other rough hardware.
- C. Gypsum Board: Stack large clean pieces on wood pallets and store in a dry location. Remove edge trim and sort with other metals. Remove and dispose of fasteners.

- D. Equipment: Drain tanks, piping, and fixtures. Seal openings with caps or plugs. Protect equipment from exposure to weather.
- E. Plumbing Fixtures: Separate by type and size.
- F. Piping: Reduce piping to straight lengths and store by type and size. Separate supports, hangers, valves, sprinklers and other components by type and size.
- G. Lighting Fixtures: Separate lamps by type and protect from breakage.
- H. Electrical Devices: Separate switches, receptacles, switchgear, transformers, meters, panelboards, circuit breakers and other devices by type.
- I. Conduit: Reduce conduit to straight lengths and store by type and size.

3.5 RECYCLING CONSTRUCTION WASTE

- A. Packaging:
 1. Cardboard and Boxes: Break down packaging into flat sheets. Bundle and store in a dry location.
 2. Polystyrene Packaging: Separate and bag materials.
 3. Pallets: As much as possible, require deliveries using pallets to remove pallets from Project site. For pallets that remain on-site, break down pallets into component wood pieces and comply with requirements for recycling wood.
 4. Crates: Break down crates into component wood pieces and comply with requirements for recycling wood.
- B. Wood Materials:
 1. Clean Cut-Offs of Lumber: Grind or chip into small pieces.
 2. Clean Sawdust: Bag sawdust that does not contain painted or treated wood.
- C. Gypsum Board: Stack large clean pieces on wood pallets and store in a dry location.
 1. Clean Gypsum Board: Grind scraps of clean gypsum board using small mobile chipper or hammer mill. Screen out paper after grinding.

3.6 DISPOSAL OF WASTE

- A. General: Except for items or materials to be salvaged, recycled or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
 1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Do not burn waste materials.
- C. Disposal: Transport waste materials off Owner's property and legally dispose of them.

END OF SECTION 01 7419



Waste Disposal and Recycling Data Form

The resource conservation program at KCHA tracks the disposal and recycling data for all KCHA activities. These includes all of the waste and recycling generated by residents, food composting, yard waste composting, unit-improvement waste, illegal dumping waste, and all waste created during the construction and demolition process.

Our goals for all of these areas are:

1. Track the diversion of our waste and improve when possible
2. Meet KCHA recycling goals.

Please provide estimates, to the best of your ability, about the projected waste being generated on this project as well as how much of that waste is being recycled vs disposed. If estimates aren't possible, then we will need this information at project close-out.

Project Name: Eastridge House Fire Monitoring System Upgrade

Project Address: 120 West Sunset Way, Issaquah, WA 98027

Work Order No.: 1349 **Job No.:** 451.7

DESCRIPTION	WEIGHT	QUANTITY (Circle One)		
		Lbs.	CY	Tons
Total Waste Generated**		Lbs.	CY	Tons
Waste Disposed		Lbs.	CY	Tons
Waste Recycled		Lbs.	CY	Tons
**Waste Disposed plus Waste Recycled should equal Total Waste Generated				
What % of the total waste do you estimate you will recycle?				

The following tables identify materials expected on this project, the quantities generated, whether they will be disposed or recycled, and what facility they will be disposed or recycled at.

DEMOLITION PHASE				
MATERIAL	QUANTITY Lbs./CY/Tons	DISPOSAL / RECYCLE? (CIRCLE ONE)		DISPOSAL OR RECYCLING FACILITY
		Disposal	Recycle	
		Disposal	Recycle	
		Disposal	Recycle	
		Disposal	Recycle	
		Disposal	Recycle	
		Disposal	Recycle	

Example: Roofing, 3 tons, Recycle, DTG Recycle

CONSTRUCTION PHASE				
MATERIAL	QUANTITY Lbs./CY/Tons	DISPOSAL / RECYCLE? (CIRCLE ONE)		DISPOSAL OR RECYCLING FACILITY
		Disposal	Recycle	
		Disposal	Recycle	
		Disposal	Recycle	
		Disposal	Recycle	
		Disposal	Recycle	
		Disposal	Recycle	

Example: Misc. Con. Mat., 30 cy, Recycle, Waste Management

SECTION 01 7700 CLOSEOUT PROCEDURES

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Inspection procedures.
 - 2. Warranties.
 - 3. Final cleaning.
- B. See the Owner-Contractor Contract for requirements for Applications for Payment for Substantial and Final Completion.
- C. See Division 01 7839 Section "Project Record Documents" for submitting Record Drawings, Record Specifications and Record Product Data.
- D. See Division 01 7823 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
- E. See Divisions 02 through 33 Sections for specific closeout and special cleaning requirements for the Work in those Sections. Not all Sections will be used.

1.3 SUBSTANTIAL COMPLETION (Refer to Article 9.8 AIA A201-2017)

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
 - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
 - 2. Advise Owner of pending insurance changeover requirements.
 - 3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications and similar documents (to be included in O&M Manuals).
 - 4. Obtain and submit to Owner, the releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 5. Prepare and submit Project Record Documents, operation and maintenance manuals, damage or settlement surveys, property surveys and similar final record information to the Owner.
 - 6. Deliver tools, spare parts, extra materials and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
 - 7. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.

8. Complete startup testing of systems.
 9. Submit test/adjust/balance records to the Owner.
 10. Terminate and remove temporary facilities from Project site, along with mockups, construction tools and similar elements.
 11. Advise Owner of changeover in heat and other utilities.
 12. Submit changeover information related to Owner's occupancy, use, operation and maintenance.
 13. Complete final cleaning requirements, including touchup painting.
 14. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
 15. Provide training on all newly installed systems by qualified personnel. Training will be presented to those that use the equipment, i.e. tenants site staff, facility users.
- B. Inspection: Submit a written request for inspection for Substantial Completion to the Owner. On receipt of request, Owner will either proceed with inspection or notify Contractor of unfulfilled requirements. Owner 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 Owner, that must be completed or corrected before certificate will be issued.
1. Re-inspection: Request re-inspection 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.

1.4 CONTRACT COMPLETION (Refer to Article 9.10 in AIA A201-2017)

- A. Preliminary Procedures: Before requesting final inspection for determining date of Contract Completion, complete the following:
1. Submit a final Application for Payment according to the Owner-Contractor Contract provisions to the Owner.
 2. Submit to the Owner, a certified copy of Owner's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Owner. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 3. Submit evidence of final, continuing insurance coverage complying with insurance requirements to the Owner.
 4. Instruct Owner's personnel in operation, adjustment and maintenance of products, equipment and systems.
- B. Inspection: Submit a written request for final inspection for acceptance to the Owner. On receipt of request, Owner will either proceed with inspection or notify Contractor of unfulfilled requirements. Owner will notify Contractor of construction that must be completed or corrected before certificate will be issued.
1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.5 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Preparation: After Contractor has performed own Quality Control of the Work, Contractor will notify and schedule punch list inspection with Owner and other team

members. Owner will document items needing correction on Owner provided form listing area inspected and deficient item needing correction. Owner will provide Contractor with copy of punch list after inspection is completed. Owner has right to stop inspection due to quantity of repetitious items identified by Owner, or if Contractor has not performed own Quality Control of the Work

1. Organize list of spaces in sequential order.
2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment and building systems.

1.6 WARRANTIES (Refer to Article 3.5 in AIA A201-2017)

- A. Submittal Time: Submit written warranties on request of Owner for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.
- 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, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch 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.
- 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.

PART 3 EXECUTION

3.1 FINAL CLEANING

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and anti-pollution 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 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. Remove tools, construction equipment, machinery and surplus material from Project site.
 - d. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 - e. Sweep concrete floors broom clean in unoccupied spaces.
 - f. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain.
 - g. 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.
 - h. Remove labels that are not permanent.
 - i. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
 - 1) Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.
 - j. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess lubrication, paint and mortar droppings and other foreign substances.
 - k. Replace parts subject to unusual operating conditions.
 - l. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
 - m. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers and grills.
 - n. Clean light fixtures, lamps, globes and reflectors to function with full efficiency. Replace burned-out bulbs and those noticeably dimmed by hours of use, and defective or noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
 - o. Leave Project clean and ready for occupancy.
- C. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

END OF SECTION 01 7700

SECTION 01 7823
OPERATION AND MAINTENANCE DATA

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
1. Operation manuals for systems, subsystems, and equipment Maintenance manuals for the care and maintenance of products, materials, finishes, systems, and equipment.
- B. See Divisions 02 through 33 Sections for specific operation and maintenance manual requirements for the Work in those Sections. Every Division may not be used.

1.3 SUBMITTALS

- A. Manual: Submit one (1) electronic copy of each manual in final form at least fifteen (15) calendar days before final inspection. Owner will return copy with comments within fifteen (15) calendar days after final inspection.
1. Correct or modify each manual to comply with Owner's comments. Submit two (2) hard copies and one (1) electronic copy on Compact Disk of each corrected manual within fifteen (15) calendar days of receipt of Owner's comments.

PART 2 - PRODUCTS

2.1 MANUALS- GENERAL

- A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain a title page, table of contents and manual contents.
- B. Title Page: Enclose title page in transparent plastic sleeve. Include the following information:
1. Subject matter included in manual.
 2. Name and address of Project.
 3. Name and address of Owner.
 4. Date of submittal.
 5. Name, address and telephone number of Contractor.
 6. Name and address of Architect.
 7. Cross-reference to related systems in other operation and maintenance manuals.

- C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.
- D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem and equipment. If possible, assemble instructions for subsystems, equipment and components of one (1) system into a single binder.
 - 1. Binders: Heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.
 - a. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, and subject matter of contents. Indicate volume number for multiple-volume sets.
 - 2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.
 - 3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software diskettes for computerized electronic equipment.
 - 4. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
 - a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
 - b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents and drawing locations.

2.2 OPERATION MANUALS

- A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and equipment descriptions, operating standards, operating procedures, operating logs, wiring and control diagrams, and license requirements.
- B. Descriptions: Include the following:
 - 1. Product name and model number.
 - 2. Manufacturer's name.
 - 3. Equipment identification with serial number of each component.
 - 4. Equipment function.
 - 5. Operating characteristics.
 - 6. Limiting conditions.
 - 7. Performance curves.
 - 8. Engineering data and tests.
 - 9. Complete nomenclature and number of replacement parts.
- C. Operating Procedures: Include start-up, break-in and control procedures; stopping and normal shutdown instructions; routine, normal, seasonal and weekend operating instructions; and required sequences for electric or electronic systems.

- D. Systems and Equipment Controls: Describe the sequence of operation and diagram controls as installed.
- E. Piped Systems: Diagram piping as installed and identify color-coding where required for identification.

2.3 PRODUCT MAINTENANCE MANUAL

- 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; identify by product name and arrange 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. Re-ordering information for specially manufactured products.
- D. Maintenance Procedures: Include manufacturer's written recommendations and inspection procedures, types of cleaning agents, methods of cleaning, schedule for cleaning and maintenance, and 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.

2.4 SYSTEMS AND EQUIPMENT MAINTENANCE MANUAL

- A. Content: For each system, subsystem and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.
- B. Source Information: List each system, subsystem, and piece of equipment included in manual; identify by product name and arrange 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. Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including maintenance instructions, drawings and diagrams for maintenance, nomenclature of parts and components, and recommended spare parts for each component part or piece of equipment.

- D. Maintenance Procedures: Include test and inspection instructions, troubleshooting guide, disassembly instructions, and adjusting instructions that detail essential maintenance procedures.
- E. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.
- F. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.
- G. Maintenance Service Contracts: Include copies of maintenance agreements with name and telephone number of service agent.
- H. 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. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem and piece of equipment not part of a system.
- C. 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 includes more than one (1) 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.
- D. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in Record Drawings to ensure correct illustration of completed installation.
 - 1. Do not use original Project Record Documents as part of operation and maintenance manuals.
- E. Comply with Division 01 7700 Section "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

END OF SECTION 01 7823

SECTION 01 7839
PROJECT RECORD DOCUMENTS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for Project Record Documents, including the following:
 - 1. Record Drawings.
 - 2. Record Specifications.
 - 3. Record Product Data.
- B. See Division 01 7823 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
- C. See Divisions 02 through 33 Sections for specific requirements for Project Record Documents of the Work in those Sections. Every Division may not be used.

1.3 CLOSEOUT SUBMITTALS

- A. Record Drawings: Submit to Owner PDF **and CAD** files of scanned record prints and three (3) sets of prints.
- B. Record Specifications: Submit annotated PDF electronic files of Project's Specifications, including addenda and contract modifications to the Owner.
- C. Record Product Data: Submit to the Owner, annotated PDF electronic files and directories of each submittal.
 - 1. Where record Product Data are required as part of operation and maintenance manuals, submit duplicate marked-up Product Data as a component of manual.
- D. Miscellaneous Record Submittals: See other Specification Sections for miscellaneous recordkeeping requirements and submittals in connection with various construction activities.
- E. Submit annotated PDF electronic files and directories of each submittal.

PART 2 PRODUCTS

2.1 RECORD DRAWINGS

- A. Record Prints: Maintain one (1) set of black-line white prints of the Contract Drawings and Shop Drawings.

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 prepare the 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. Record and check the markup before enclosing concealed installations.
 2. Mark the Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. If Shop Drawings are marked, show cross-reference on the Contract Drawings.
 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 Field Authorization numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
- B. 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. 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. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
 3. Record the name of manufacturer, supplier, Installer and other information necessary to provide a record of selections made.
 4. Note related Change Orders, Record Product Data and Record Drawings where applicable.

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 Orders, Record Specifications and Record Drawings where applicable.

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.

PART 3 EXECUTION

3.1 RECORDING AND MAINTENANCE

- A. Recording: Maintain one (1) copy of each submittal during the construction period for Project Record Document purposes. Post changes and modifications to Project Record Documents as they occur; do not wait until the 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 Owner's reference during normal working hours.

END OF SECTION 01 7839

G703 - Continuation Sheet

SITE NAME - PROJECT NAME; Contract No. CCxxxxx65

APPLICATION NO:

APPLICATION DATE:

PERIOD FROM:

PERIOD TO:

06 FINAL

04.19.21

04.01.21

04.19.21

A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D WORK COMPLETED		F MATERIALS PRESENTLY STORED (NOT IN D OR E)	G TOTAL COMPLETED & STORED TO DATE (D + E + F)		H BALANCE TO FINISH (C - G)	I RETAINAGE (AGGREGATE TO DATE)
			FROM PREVIOUS APPLICATION(S) (G)	THIS PERIOD		% (G ÷ C)			
	Allowance & Contingencies	29,000.00	18,851.74	10,148.26	0.00	29,000.00	100.00%	0.00	1,450.00
	Close out	13,523.33	6,761.00	6,762.33	0.00	13,523.33	100.00%	0.00	676.17
	Bond & Insurance	24,050.00	24,050.00	0.00	0.00	24,050.00	100.00%	0.00	1,202.50
	Mobilization	17,500.00	17,500.00	0.00	0.00	17,500.00	100.00%	0.00	875.00
	Demo Siding and Windows	30,000.00	30,000.00	0.00	0.00	30,000.00	100.00%	0.00	1,500.00
	Frame & GWB F/P, Door, Storage	19,000.00	19,000.00	0.00	0.00	19,000.00	100.00%	0.00	950.00
	Deck Coatings	15,500.00	15,500.00	0.00	0.00	15,500.00	100.00%	0.00	775.00
	Deck Railings	23,500.00	21,150.00	2,350.00	0.00	23,500.00	100.00%	0.00	1,175.00
	Roofing incl Ladders and Hatches	57,300.00	28,650.00	28,650.00	0.00	57,300.00	100.00%	0.00	2,865.00
	Roof Framing/Backing/Blocking	11,600.00	10,600.00	1,000.00	0.00	11,600.00	100.00%	0.00	580.00
	Siding and Flashing Materials	43,000.00	43,000.00	0.00	0.00	43,000.00	100.00%	0.00	2,150.00
	Siding Labor	47,000.00	45,000.00	2,000.00	0.00	47,000.00	100.00%	0.00	2,350.00
	Window Materials	16,000.00	16,000.00	0.00	0.00	16,000.00	100.00%	0.00	800.00
	Window Labor	15,000.00	15,000.00	0.00	0.00	15,000.00	100.00%	0.00	750.00
	Patio Door Materials	9,600.00	9,600.00	0.00	0.00	9,600.00	100.00%	0.00	480.00
	Patio Door Labor	9,800.00	9,800.00	0.00	0.00	9,800.00	100.00%	0.00	490.00
	Exterior Doors & Hardware Materials	13,500.00	13,500.00	0.00	0.00	13,500.00	100.00%	0.00	675.00
	Exterior Door Labor	10,625.00	10,625.00	0.00	0.00	10,625.00	100.00%	0.00	531.25
	Door Hardware Materials	2,200.00	2,200.00	0.00	0.00	2,200.00	100.00%	0.00	110.00
	Gutters	4,200.00	0.00	4,200.00	0.00	4,200.00	100.00%	0.00	210.00
	Flameblock Labor	15,000.00	15,000.00	0.00	0.00	15,000.00	100.00%	0.00	750.00
	Flameblock Materials	14,000.00	14,000.00	0.00	0.00	14,000.00	100.00%	0.00	700.00
	Blinds	8,500.00	8,500.00	0.00	0.00	8,500.00	100.00%	0.00	425.00
	Electrical & Lighting Fixtures	12,800.00	12,800.00	0.00	0.00	12,800.00	100.00%	0.00	640.00
	Exterior Painting	18,000.00	17,000.00	1,000.00	0.00	18,000.00	100.00%	0.00	900.00
	Indirect Costs/Overhead/Profit	103,569.63	90,210.00	13,359.63	0.00	103,569.63	100.00%	0.00	5,178.48
	CO 1 - Contingency	(8,218.97)	0.00	(8,218.97)	0.00	(8,218.97)	100.00%	0.00	(410.95)
	TOTALS	575,548.99	514,297.74	61,251.25	0.00	575,548.99	100.00%	0.00	28,777.45
	5% RETAINAGE	28,777.45	25,714.89	3,062.56	0.00	28,777.45			
	TOTALS LESS RETAINAGE	546,771.54	488,582.85	58,188.69	0.00	546,771.54		0.00	28,777.45
	TOTAL BALANCE TO FINISH (H + I)								28,777.45
	NET CHANGE ORDERS THIS PERIOD:	(8,218.97)	CHANGE ORDERS APPROVED THIS PERIOD (LIST C/O #s)			1			
	NET C/O ADDITIONS (THIS PERIOD):	0.00	NET C/O DEDUCTIONS (THIS PERIOD):			(8,218.97)			
	TOTAL CHANGE ORDERS TO DATE:	(8,218.97)							

Form G702

V - 105694

Application and Certificate for Payment

TO OWNER:	King County Housing Authority Attn: Capital Construction Dept. 700 Andover Park W. Suite C Tukwila, WA 98188	PROJECT NAME / SCOPE OF WORK:	SITE NAME PROJECT NAME	APPLICATION NO: 06 FINAL	PERIOD TO: 04.19.21	Distribution to:
FROM CONTRACTOR:	CONTRACTOR NAME CONTRACTOR ADDRESS CITY, STATE, ZIP	VIA ARCHITECT:	ARC 119 S. MAIN ST. SUITE 200 SEATTLE, WA 98104-2579	CONTRACT NO: CCxxxxx65	CONTRACT DATE: 11/16/2020	OWNER: <input checked="" type="checkbox"/>
				NTP DATE: 11/16/2020	PROJECT NO: 215.1B	ARCHITECT: <input type="checkbox"/>
				WORK ORDER NO: 1243		CONTRACTOR: <input type="checkbox"/>
						FIELD: <input type="checkbox"/>
						: <input type="checkbox"/>

CONTRACTOR'S APPLICATION FOR PAYMENT

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

1. ORIGINAL CONTRACT SUM.....	\$583,767.96
2. NET CHANGE BY CHANGE ORDERS.....	(\$8,218.97)
3. CONTRACT SUM TO DATE (Line 1 +/- 2).....	\$575,548.99
4. TOTAL COMPLETED & STORED TO DATE (Column G on G703).....	\$575,548.99
5. RETAINAGE:	
a. <u>5</u> % of Completed Work (Column D + E on G703: \$575,548.99)= \$28,777.45	
b. <u>5</u> % of Stored Material (Column F on G703: \$0.00)= \$0.00	
Total Retainage (Lines 5a + 5b or Total in Column I of G703).....	\$28,777.45
6. TOTAL EARNED LESS RETAINAGE.....	\$546,771.54
(Line 4 Less Line 5 Total)	
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT.....	\$488,582.85
(Line 6 from prior Certificate)	
8. CURRENT PAYMENT DUE.....	\$58,188.69
9. BALANCE TO FINISH, INCLUDING RETAINAGE (Line 3 Less Line 6)	\$28,777.45

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

CONTRACTOR:
By: _____ Date: _____

State of: _____
County of: _____

Subscribed and sworn to before
me this _____ day of _____

Notary Public: _____
My Commission expires: _____

OWNER'S REPRESENTATIVE CERTIFICATE FOR PAYMENT

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

AMOUNT CERTIFIED..... \$58,188.69

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

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner	\$0.00	\$0.00
Total approved this month. (CO numbers listed below)	\$0.00	(\$8,218.97)
#s: 1 TOTALS	\$0.00	(\$8,218.97)
NET CHANGES by Change Order		(\$8,218.97)

OWNER'S REPRESENTATIVE:
By: _____ Date: _____

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



GENERAL CONTRACTOR CERTIFICATION UPON APPLICATION FOR PAYMENT

OWNER:	<u>King County Housing Authority</u>	PAY REQUEST NUMBER:	<u>06</u>
GENERAL CONTRACTOR:	<u>CONTRACTOR NAME</u>	DATE: PERIOD FROM:	<u>04.01.21</u>
PROJECT NAME:	<u>SITE NAME</u>	THROUGH:	<u>04.19.21</u>
SCOPE OF WORK:	<u>PROJECT NAME</u>	CONTRACT NUMBER:	<u>CCxxxxx65</u>

1.	ORIGINAL CONTRACT AMOUNT:	\$	<u>583,767.96</u>
2.	APPROVED CHANGE ORDER(S):	\$	<u>(8,218.97)</u>
3.	CURRENT CONTRACT AMOUNT:	\$	<u>575,548.99</u>
4.	AMOUNT OF PREVIOUS CERTIFICATES FOR PAYMENT:	\$	<u>488,582.85</u>
5.	AMOUNT OF CURRENT CERTIFICATE FOR PAYMENT REQUEST:	\$	<u>58,188.69</u>

By submitting the accompanying Application for Payment, the Contractor certifies, agrees and warrants to the Owner as follows:

- The Contractor has made full payment to all laborers, subcontractors and suppliers of material and equipment whose charges were included in any prior Application for Payment, subject only to (a) retainage at the contract rate, and (b) the matters set forth below or on an attachment hereto.
- The Contractor knows of no one making a claim for payment other than those included in the current Application for Payment, who will be paid when the current Application for Payment is paid by Owner, except as noted below or on an attachment hereto.
- In consideration of payments made by Owner, the Contractor hereby waives and releases any and all claims and demands against Owner and the Project for all periods up to and including the period covered by this Application for Payment, subject only to (a) receipt of payment of the current Application, (b) applicable retainage, and (c) the matters set forth below or on an attachment hereto.

EXCEPTION(S) - DESCRIPTION:

AMOUNT:

GENERAL CONTRACTOR NAME: _____ **CONTRACTOR NAME** _____

BY AUTHORIZED SIGNER: _____ PRINT NAME _____ TITLE _____ DATE _____

State of Washington
County of King

I certify that I know or have satisfactory evidence that _____ is the person who appeared before me, and said person acknowledged that (he/she) signed this instrument and acknowledged it to be (his/her) free and voluntary act for the uses and purposes mentioned in the instrument.

Signed before me on this _____ Day of _____

SEAL

Notary Public in and for the State of Washington

Residing at: _____

My Commission Expires: _____





SUBSTITUTION REQUEST

Project: _____ Sub. Request #: _____
 _____ From: _____
 To: _____ Date: _____
 _____ A/E Project #: _____
 Re: _____ Contract For: _____

Specification Title: _____ Description: _____
 Section: _____ Page: _____ Article / Paragraph: _____

Proposed Substitution: _____
 Manufacturer: _____
 Address: _____ Phone: _____
 Trade Name: _____ Model No.: _____
 Installer: _____
 Address: _____ Phone: _____
 History: New Product 2 - 5 years old 5 - 10 years old More than 10 years old

Differences between proposed substitution and specified product: _____

Point-by-point comparative data attached - REQUIRED BY A/E

Reason for not providing specified item: _____

Similar Installation:
 Project: _____ Architect: _____
 Address: _____ Owner: _____
 _____ Data Installed: _____

Proposed substitution affects other parts of Work: No Yes; Explain: _____

Savings to Owner for accepting substitution: _____ (\$ _____).

Proposed substitution changes Contract Time: No Yes (If Yes): Add Deduct _____ days.

*If Contract time is to be extended, a Change Order must be prepared.

Supporting Data Attached: Drawings Product Data Samples Tests Reports _____

SUBSTITUTION REQUEST

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, included A/E design, and construction costs caused by the substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

Submitted by: _____

Signed by: _____

Firm: _____

Address: _____

Telephone: _____

Attachments: _____

A/E's Review and Action:

- Substitution approved - Make submittals in accordance with Specification Section
- Substitution approved as noted - Make submittals in accordance with Specification Section
- Substitution rejected - Use specified materials.
- Substitution Request received too late - Use specified materials.

Signed by: _____ Date: _____

**SECTION 024100
SELECTIVE DEMOLITION**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
1. Selective demolition and removal of building and site elements as indicated on drawings and as needed to perform scope of work, including but not limited to:
 2. Existing plumbing system piping and fixtures for reuse, except where new replacement is shown.
 3. Existing walls, floors, doors and finishes for cutting, patching and repair.
- B. Protect existing building and site elements scheduled to remain during demolition activities and while new work is being installed.

1.2 REFERENCES

- A. 29 CFR 1926- U.S. Occupational Safety and Health Standards; current edition.
- B. NFPA 241- Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2009.

1.3 SUBMITTALS

- A. See Division 1 Project Administration. Refer to BID PACKAGE for these GENERAL REQUIREMENTS.
- B. Schedule: Submit for approval of selective demolition schedule, including schedule for any interruption of utility service to affected units and interruption to tenants' daily activities.
- C. Site Plan: Showing:
1. Vegetation to be protected.
 2. Restore landscaping and hardscaping at areas disturbed by construction.
 3. Areas for temporary construction and field offices.
 4. Areas for temporary and permanent placement of removed materials.
- D. Demolition Plan: Submit demolition plan as specified by OSHA and local authorities.
1. Indicate extent of demolition, removal sequence, bracing and shoring, if needed, and location and construction of barricades and fences.
 2. Identify demolition firm, if applicable, and submit qualifications.
 3. Include a summary of safety procedures.
 4. Indicate protection and separation of occupied premises.
 5. Continuity of site utilities: Underground utilities, including water, telephone, data, cable television, gas must remain in full operation during the work.
- E. Project Record Documents: Accurately record actual locations of capped and active utilities and subsurface construction.
- F. Schedule of demolition activities to be updated at each scheduled construction meeting.
1. Indicate detailed sequence of demolition and removal work with starting and ending dates for each activity.
 2. Indicate any interruption of services and tenant occupancy of units.

3. Indicate locations of temporary protection from the work and means of egress from the building.

1.4 QUALITY ASSURANCE

- A. Codes and Regulations: Comply with governing codes and regulations. Use experienced workers. Maintain watertight integrity as needed to protect construction to remain from structural and environmental damage.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Comply with Section 01 60 00.

1.6 PROJECT CONDITIONS

- A. Building(s) will be occupied during demolition and construction; it is critical that the work areas are isolated to limit dust, dirt, noise and debris.
- B. Protection of Existing Improvements: Provide, erect and maintain barricades, coverings, or other types of protection necessary to prevent damage to existing improvements. Restore any site improvements, including but not limited to landscaping, pavement, walks, structures, fences and planters, damaged by this work to their original condition, as acceptable to Owner.
- C. Existing Conditions: Refer to construction drawing sets for each site for information. No responsibility for portions of building to be demolished will be assumed by the Owner.

PART 2 PRODUCTS

2.1 DEMOLITION APPLICATIONS

- A. To Contractor: All other salvage becomes property of the Contractor.
- B. Selective Building Demolition:
 1. Demolition of specified building and site elements and as indicated on drawings.
 2. Protection of portions of building adjacent to or affected by selective demolition.
 3. Notification to Owner of schedule of shut-off of utilities which serve occupied spaces.
 4. Pollution control during selective demolition.
 5. Removal and legal disposal of materials.
 6. Protection of existing site improvements and adjacent construction.
 7. Utilities: Interruption, capping or removal as applicable.

PART 3 EXECUTION

3.1 SCOPE

- A. Remove portions of existing buildings as indicated on the drawings or as needed to perform the scope of work.
- B. Remove other items indicated for salvage, relocation or recycling.
- C. Fill excavations, open pits and holes in ground areas generated as result of removals, using specified fill; compact fill as required so that required rough grade elevations do not subside within one (1) year after completion.
- D. Restore landscaping or hardscaping at areas disturbed by construction.

- E. Do not damage building elements and improvements indicated to remain. Items of salvage value, not included on schedule of salvage items to be returned to Owner, shall be removed from the site. Storage or sale of items at project site is prohibited.
- F. Occupied Spaces: Do not close or obstruct streets, walks, drives or other occupied or used spaces or facilities without the written permission of the Owner and the authorities having jurisdiction. Do not interrupt utilities serving occupied or used facilities without the written permission of the Owner; Owner requires minimum ninety-six (96) hours' notice of any utility shutoffs affecting non-remodeled units or common spaces. Email notice to Owner's Project Manager is acceptable as official "written notice".

3.2 GENERAL PROCEDURES AND PROJECT CONDITIONS

- A. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
 - 1. Refer to Section 01 74 19 Construction Waste Management and Disposal for additional requirements.
 - 2. Owner shall submit for building and plumbing permits. Obtain approved permits and any additional permits that may be required by jurisdiction.
 - 3. Comply with applicable requirements of NFPA 241.
 - 4. Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.
 - 5. Provide, erect and maintain temporary barriers and security devices.
 - 6. Use physical barriers to prevent access to areas that could be hazardous to workers or the public.
 - 7. Conduct operations to minimize effects on and interference with adjacent structures and occupants.
 - 8. Do not close or obstruct roadways or sidewalks without permit.
 - 9. Conduct operations to minimize obstruction of public and private entrances and exits; do not obstruct required exits at any time; protect persons using entrances and exits from removal operations.
- B. Obtain written permission from owners of adjacent properties when demolition equipment will traverse, infringe upon or limit access to their property.
- C. Do not begin removal until receipt of notification to proceed from Owner.
 - 1. Protect existing structures and other elements that are not to be removed.
 - 2. Provide bracing and shoring.
 - 3. Prevent movement or settlement of adjacent structures.
 - 4. Stop work immediately if adjacent structures appear to be in danger.
- D. Minimize production of dust due to demolition operations; do not use water if that will result in damage to existing property, ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.
- E. If hazardous materials are discovered during removal operations, stop work and notify the Owner; hazardous materials include regulated asbestos containing materials, lead, PCB's, and mercury.
- F. Perform demolition in a manner that maximizes salvage and recycling of materials.

3.3 EXISTING UTILITIES

- A. Coordinate work with utility companies; notify before starting work and comply with their requirements; obtain required permits.

- B. Protect existing utilities to remain from damage.
- C. Do not disrupt public utilities without permit from authority having jurisdiction.
- D. Do not close, shut off, or disrupt existing life safety systems that are in use without at least seven (7) calendar days' prior written notification to Owner and authority having jurisdiction.
- E. Do not close, shut off, or disrupt existing utility branches or take-offs that are in use without at least three (3) calendar days' prior written notification to Owner.
- F. Locate and mark utilities to remain; mark using highly visible tags or flags, with identification of utility type; protect from damage due to subsequent construction, using substantial barricades if necessary.
- G. Remove exposed piping, valves, meters, equipment, supports and foundations of disconnected and abandoned utilities.

3.4 SELECTIVE DEMOLITION FOR ALTERATIONS

- A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
 - 1. Verify that construction and utility arrangements are as shown.
 - 2. Report discrepancies to Owner before disturbing existing installation.
 - 3. Beginning of demolition work constitutes acceptance of existing conditions.
- B. Separate areas in which demolition is being conducted from other areas that are still occupied
 - 1. Provide, erect and maintain temporary dustproof partitions of construction indicated on drawings in locations of work.
- C. Maintain weatherproof exterior building enclosure except for interruptions required for replacement or modifications; take care to prevent water and humidity damage.
- D. Remove existing work as indicated and as required to accomplish new work.
 - 1. Remove items indicated on drawings.
 - 2. Remove rotted wood, corroded metals, and deteriorated masonry and concrete; replace with new construction specified.
- E. Services (including but not limited to HVAC, Plumbing, Fire Protection, Electrical and Telecommunications): Remove existing systems and equipment only as needed to perform scope of work.
 - 1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components.
 - 2. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
 - 3. Verify that abandoned services serve only abandoned facilities before removal.
 - 4. Remove abandoned pipe, ducts, conduits and equipment, including those above accessible ceilings; remove back to source of supply where possible, otherwise cap stub and tag with identification.
- F. Protect existing work to remain.
 - 1. Prevent movement of structure; provide shoring and bracing if necessary.
 - 2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
 - 3. Repair adjacent construction and finishes damaged during removal work.
 - 4. Patch as specified for patching new work.

3.5 DEBRIS AND WASTE REMOVAL

- A. Remove debris, junk and trash from site. Do not allow demolished materials to accumulate on site. See Division 01 74 19 for compliance with Waste Management requirements.
- B. Remove from site all materials not to be reused on site.
- C. Leave site in clean condition, ready for subsequent work.
- D. Clean up spillage and wind-blown debris from public and private lands.

3.6 SCHEDULE

- A. Items for Protection during Demolition and Construction:
 - 1. Common spaces and exterior walkways, including entryways.
 - 2. Adjacent construction.
 - 3. As required.

END OF SECTION

SECTION 06 20 00
INTERIOR FINISH CARPENTRY

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes installation of interior finish carpentry items including but not limited to:
 - 1. Window casing,
 - 2. Interior wood trim,
 - 3. Miscellaneous auxiliary materials, fasteners, connectors and accessories.

1.2 Related Sections

- A. Section 07 92 00 - Joint Sealants
- B. Section 09 21 00 - Gypsum Wallboard
- C. Section 09 91 00 - Painting

1.3 REFERENCES

- A. Standards and References:
 - 1. PS20 - American Softwood Lumber Standard
 - 2. AWS - Architectural Woodwork Standards
 - 3. WCLIB - Standard Grading Rules No. 17
 - 4. WWPA - Western Lumber Grading Rules

1.4 SUBMITTALS

- A. Submit in accordance with Section 01 33 00 and the following:
 - 1. Product Data: For each product and material specified.
 - 2. Include grading certifications and moisture certifications if requested by Owner.

1.5 QUALITY ASSURANCE

- A. Refer to Section 01 40 00 Quality Requirements.
- B. Regulatory: Comply with requirements of the AHJ.
- C. Grading and Marking: Identify lumber and sheet products by official grade mark.
 - 1. Lumber: Mark each piece or each bundle of small pieces of lumber with the grade mark of a recognized association or independent inspection agency certified by the ALSC Board, to grade the species used.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Delivery, Storage and Handling:
 - 1. Deliver finish carpentry to jobsite only after painting, wet work, grinding, and similar operations are completed. Maintain environmental conditions at the site, including both storage and installation areas as recommended by manufacturer and fabricator.
 - 2. Protect from damage at all times.

1.7 PROJECT SITE CONDITIONS

- A. Environmental Requirements:
 - 1. Building shall be thoroughly dry, finish work completed and HVAC system operational maintaining temperature and relative humidity at occupancy levels for remainder of the construction period before finish woods are placed in it.

2. Maintain ambient relative humidity at the site, for both storage and installation.
 3. Acclimate materials prior to installation as recommended by manufacturer.
- B. Refer to AWS Section 2, for additional requirements.

PART 2 PRODUCTS

2.1 Materials

- A. Casing Header: 1" x 3" MDF Flat stock.
- B. Casing Legs: 9/16" x 2-1/2" MDF Flat stock.
- C. Casing Sill: Acrylic solid surfacing .5" nominal sheet thickness.
- D. Casing Apron: 9/16" x 2-1/2" MDF Flat stock.
- E. Jamb Liner: 1/2" x 1-3/8" Clear Poplar S4S. Bullnose profile.
- F. Moisture Content (at time of delivery to job site) Maximum 9 percent.
- G. Comply with AWS "Custom" Grade quality standards. AWS Section 6.

2.2 ACCESSORIES AND HARDWARE

- A. Acrylic solid surface: Acceptable manufacturers-Hi-Macs, Living Stone, Wilsonart International, Solid surface or acceptable. Pattern and Finish to be selected by owner from Manufacturers standard line.
- B. Glue for Woodwork: Aliphatic-resin, polyurethane, or resorcinol wood glue, waterproof for work subject to moisture; AWS Type I or Type II, best quality for intended use.
- C. Rough Hardware:
 1. Provide necessary nails, screws and the like, or material, type, size and finish as required for each substrate condition, for secure anchorage.
 2. Use recessed screws, finish or casing nails for exposed work, unless otherwise indicated.
 3. Fastenings/Quantities: Furnish as necessary whether indicated or not.
- D. Miscellaneous Items: Provide miscellaneous items required for completion of architectural woodwork as indicated with quality consistent with that specified for related woodwork.

PART 3 EXECUTION

3.1 PREPARATION

- A. Field Verification:
 1. Measurements: Take dimensions necessary prior to installation.
 2. Verify adequacy of support framing.
 3. Verify mechanical, electrical and building items affecting work of this section are placed and ready to receive this work.
- B. Verify moisture content of finish carpentry materials; do not install materials that are wet, moisture damaged or mold damaged. Condition materials to average prevailing temperature and humidity in installation areas for a minimum of twenty-four (24) hours prior to installing interior finish carpentry.
- C. Protect surrounding areas or surfaces to preclude damage during installation.

3.2 INSTALLATION

- A. Install work in accordance with referenced AWS Manual for "Custom" Quality Standard unless otherwise specified.
 1. Carefully scribe work butting other components with maximum 1/32 inch gap.

2. Prior to securing items, adjust to ensure proper matching at joints and correct alignment throughout their length. Shim as required using concealed shims.
 3. Ease exposed edges of finish work to match existing adjacent.
 4. Set and secure materials and components in place, plumb and level with tight joints.
 5. Do not use additional overlay trim to conceal larger gaps unless specifically approved by Owner after review of conditions of installation.
 6. Miter casings and moldings where indicated or directed.
 7. Use finish nails except where screws required or other fastening indicated.
 8. Set nails and screws for puttying. Countersink fasteners. Putty recesses.
 9. Where screw attachment required, space screws at equal intervals.
 10. Select and cut material to exclude damaged, marked or defective areas.
 11. Provide for thermal and building movements.
- B. Erection Tolerances:
1. Maximum variation from true positions: 1/32 inch.
 2. Adjoining Surfaces of Same Material: No variance permitted.
 3. Maximum offset from true alignment with abutting materials: 1/32 inch.
 4. Final Adjustment and Cleaning: Whenever the hardware installation is made more than one (1) month prior to acceptance of the Work, make final adjustment and check of hardware during the week immediately prior to acceptance, unless otherwise directed by the Owner's Representative.
 5. Clean and re-lubricate operating items as necessary.
 6. Make final adjustment of locksets and closers to compensate for operation of heating and ventilating systems under the supervision of manufacturer's representative.
 7. At completion of work, factory representatives for door closers and locksets are required to inspect and adjust their materials.
 8. Turn over to Owner one (1) copy of template and installation instructions for each type of hardware.
 9. Make further adjustments required during one (1)-year guarantee period.
- C. Miscellaneous: Install other items necessary to complete normal finish carpentry work.
- 3.3 ADJUSTMENT, CLEANING, FINISHING, AND PROTECTION
- A. Fitting and Adjustment: Make final fitting and adjustments as required.
 - B. Repair or replace damaged, stained, scratched or otherwise disfigured work. Repairs shall match undamaged work, replace items where repairs are noticeable from one (1') foot distance.
 - C. Remove dirt and foreign materials from woodwork and casework on exposed and semi-exposed surfaces upon completion of installation. Clean interior and exterior surfaces; clean and polish hardware.

END OF SECTION

**SECTION 07 92 00
JOINT SEALANTS**

PART 1 GENERAL

1.1 CONTRACT CONDITIONS

- A. Work of this Section is bound by the Contract Conditions and Division 1, bound herewith, in addition to this Specification and accompanying Drawings.

1.2 EXTENT OF WORK

- A. Caulk Exterior Joints as follows:
 - 1. Masonry Wall Control Joints: Modified Silicone (STPe) Sealant with Sand matching Mortar color impregnated into Sealant surface to approximate Mortar Joint appearance.
 - 2. Joints around Window Frames, Door Frames, and other Openings in Exterior Walls: Modified Silicone (STPe) Sealant.
 - 3. Joints between Floor and bottom of Door Frames: Modified Silicone (STPe) Sealant.
 - 4. Joints between adjacent Dissimilar Materials: Modified Silicone (STPe) Sealant.
 - 5. Elsewhere caulking is shown on Drawings or required to weatherproof Building: Modified Silicone (STPe) Sealant.
- B. Caulk within Exterior Frame Walls as follows:
 - 1. Space between Wall Framing Members and Windows, Doors, and other Openings where subject to Air-infiltration: Foam Air-Infiltration Sealant.
 - 2. Space beneath Wall Base Plates: Foam Air-Infiltration Sealant.
- C. Caulk Interior Joints as follows:
 - 1. Masonry Wall Control Joints: Acrylic Latex Sealant. If and where Joint is exposed to view impregnate Joint with Sand matching Mortar color to approximate Mortar Joint appearance.
 - 2. Joints around Window Frames, Door Frames, and other Openings in Exterior Walls: Acrylic Latex Sealant.
 - 3. Joints between Resilient Flooring: Modified Silicone (STPe) Sealant.
 - 4. Joints between adjacent Dissimilar Materials: Acrylic Latex Sealant.
 - 5. Elsewhere caulking is shown on Drawings or required to fill Open Joints: Acrylic Latex Sealant.

1.3 RELATED WORK SPECIFIED IN OTHER SECTIONS

- A. Sealant-type Firestopping: Section 07 84 00.

1.4 COORDINATION

- A. Coordinate with other Trades affecting or affected by Work of this Section.

1.5 INSTALLER'S QUALIFICATIONS

- A. Installer must have successfully completed at least 2 similar Projects, and be in full-time business performing Work of this type.

1.6 FIELD MOCK UP

- A. Provide examples of each type of Joint Sealant for Owner's review.
- B. Prepare, if necessary, until Mock Up is accepted.
- C. Accepted Mock Ups represent minimum standard, and Work of lesser quality is subject to rejection.
- D. Approved Mock Ups may be used on Project Work.

1.7 CERTIFICATE OF COMPLIANCE

- A. Submit, upon Work completion, Manufacturer's written certification that specified Sealants have been properly installed.

1.8 PRODUCT DELIVERY, STORAGE, & HANDLING

- A. Protect against damage and discoloration.
- B. Store in original, tightly sealed Containers, and with original legible Labels thereon. Do not open Containers or remove Labels until Owner reviews.
- C. Do not exceed Sealant shelf life.

1.9 WEATHER REQUIREMENTS

- A. Perform no Work when weather exceeds Manufacturer's specified limits.
- B. Prohibited Air Temperature:
 - 1. Minimum: 40°F and falling.
 - 2. Maximum: 90°F and rising.

1.10 WARRANTY

- A. Warrant exterior Joint Sealant Work for 10 years following Project Substantial Completion date that Sealants will not lose their adhesion or cohesion.
- B. Work of this Section will remain weatherproof, and Contractor will repair and/or replace without additional cost to Owner any water leaks and resulting damage to Building Materials and/or Building Contents as may occur under normal usage within Warranty Period.

PART 2 PRODUCTS

2.1 SEALANTS - GENERAL

- A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer, based on testing and field experience.
- B. Colors of Exposed Joint Sealants: Match existing.

2.2 MODIFIED SILICONE (STPE) SEALANT

- A. Manufacturer & Brand: Sonneborn Sonolastic 150, or approved.
- B. Material: 1-component Silyl Terminated Polyester.
- C. Manufacturing Standard: ASTM C-920, Type S, Class 25, Grade NS.
- D. ASTM C-661 Shore A Hardness Range: 15-20.
- E. Joint Movement Range: Plus 100% to Minus 50%.
- F. Minimum Elongation: 1200%.

2.3 SILICONE SEALANT

- A. Manufacturer & Brand: Contractor's choice.
- B. Components: 1.
- C. Manufacturing Standard: ASTM C-920, Type S, Class 25, Grade NS.
- D. Required Ingredient: Mildew Inhibitor.
- E. Cure Method: Neutral.
- F. ASTM C-661 Shore A Hardness Range: 15-20.

- G. Joint Movement Range: Plus 100% to Minus 50%.
- H. Minimum Elongation: 1200%.

2.4 ACRYLIC LATEX SEALANT

- A. Manufacturer & Brand: Contractor's choice.
- B. Components: 1.
- C. Manufacturing Standard: ASTM C-834.
- D. Minimum ASTM C-736 Recovery: 75%.
- E. Joint Movement Range: Plus or Minus 7½ %.

2.5 FOAM AIR-INFILTRATION SEALANT

- A. Manufacturer & Brand: Grace Polycel One, or approved.

2.6 SEALANT COLORS

- A. Foam Sealant: Contractor's choice.
- B. Silicone Sealant: Clear Translucent, unless otherwise indicated.
- C. All Other: Approximate color of Adjacent Surfaces, unless otherwise indicated, and subject to Owner's approval. Obtain Owner's instructions if Sealant is adjacent to more than 1 different color.

2.7 PRIMER & SURFACE CONDITIONER

- A. Manufacturer & Type: Recommended by Sealant Manufacturer.

2.8 BACKER ROD

- A. Manufacturer & Brand: Nomac SOF Rod.
- B. Material: Polyolefin Open & Closed-cell, soft-rod, non-off gassing, and recommended by Sealant Manufacturer for conditions of use.
- C. Chemically inert. Non-absorbing.
- D. Diameter: 25% greater than Joint width.
- E. Extent of Work: Provide for all Sealants, except Foamed types.

2.9 BOND BREAKER TAPE

- A. Manufacturer & Brand: Contractor's choice.
- B. Material: Polyethylene Tape, or approved.
- C. Extent of Work: Where Backer Rod cannot be used, provide Tape where necessary to prevent 3-sided adhesion of Sealant to Substrate.

2.10 FOAM SEALANT DAMS

- A. Material: Contractor's choice.
- B. Minimum UL Fire Resistance Rating:
 - 1. At Dams Remaining in Place: Match adjacent Wall or Floor Rating.
 - 2. At Dams to Be Removed: None required.

2.11 SEALANT MIXING

- A. Follow Sealant Manufacturer's directions.

PART 3 EXECUTION

3.1 EXISTING CONDITIONS

- A. Verify that Joints to be sealed are clean, dry, and free from Dust, Oil, Grease, Rust, Lacquer, loose Mortar, Ice, Frost, or other Bond-reducing Matter. If necessary, remove Bond-reducing Matter by grinding.
- B. Verify that Sealants are compatible with Substrate.
- C. Prior to starting Work, notify General Contractor about defects requiring correction.
- D. Do not start Work until conditions are satisfactory.

3.2 PROTECTING WORK OF OTHER SECTIONS

- A. Protect against damage and discoloration caused by work of this Section.
- B. Mask Surfaces adjacent to Joints as required for complete protection.

3.3 SURFACE PREPARATION

- A. Remove Dust, Dirt, Moisture, and any other Foreign Matter from Joints to be sealed.

3.4 PRIMING

- A. Unless otherwise recommended by Sealant Manufacturer, prime Surfaces to receive Sealant.
- B. Apply with Bristle Brush.
- C. Do not flood surfaces.

3.5 INSTALLATION - GENERAL

- A. Follow Manufacturers' instructions.

3.6 BACKER ROD INSTALLATION

- A. Using dry Wheeled Tool, install Backer Rod behind Sealant in accordance with Sealant Manufacturer's instructions. Do not use Lubricants to ease installation.
- B. Provide in continuous, one-piece lengths where practicable. Where discontinuous pieces are necessary, butt Rod Joints neatly and snugly.
- C. Depth behind adjacent Surface: Approximately 1/2 Joint width (1/4 inch minimum and 5/8 inch maximum).
- D. Do not stretch, twist, puncture, or tear Rods. Replace any damaged Rods.

3.7 DAM INSTALLATION

- A. Provide around Wall and Floor Penetrations to receive Foam Penetration Sealant.

3.8 FOAM SEALANT INSTALLATION

- A. Inject Sealant continuously until Opening is filled.
- B. If Opening is not filled within Sealant Snap Time or maximum of 3 minutes, stop application for at least 15 minutes before resuming work.
- C. Trim cured Foam flush with Adjacent Surface.
- D. Remove any combustible Dams.

3.9 MODIFIED SILICONE (STPE) & ACRYLIC LATEX SEALANT INSTALLATION

- A. Apply in accordance with Manufacturer's instructions using Hand or Pressure Gun type Dispenser.
- B. Size Gun Nozzle to fit Joint.
- C. Force Sealant into Joints firmly against Joint Sides to fill Joints and Voids solid; superficial pointing with Skin Bead not acceptable.
- D. Prevent 3-sided adhesion of Sealant to Substrate.
- E. Install Sealant flush with Adjacent Surface.
- F. Within 10 minutes after installation, and using Dry Tool finish Sealant to smooth, uniform, and slightly concave shape.
- G. Remove excess Sealant and Masking Materials, if any, immediately after Sealant installation.
- H. Leave Sealant Surfaces neat and smooth.

3.10 WASTE MANAGEMENT

- A. Place used Sealant Tubes, Dispensers, and Pails in Hazardous Materials containers.

3.11 PRODUCT CLEANING & REPAIRING

- A. Including Work of other Trades, clean, repair and touch-up, or replace when directed, Products which have been soiled, discolored, or damaged by Work of this Section.
- B. Remove Debris from Project Site upon Work completion, or sooner if directed.

END OF SECTION

**SECTION 09 21 00
GYPSUM WALLBOARD**

PART 1 GENERAL

1.1 SUMMARY

- A. Gypsum wallboard including but not limited to:
 - 1. Minor repairs necessary to repair damage on the interior walls that may occur adjacent to Work.
 - 2. Joint treatment and accessories.

1.2 RELATED SECTIONS

- A. Section 06 20 00 – Interior Finish Carpentry
- B. Section 07 92 00 - Joint Sealants

1.3 REFERENCE STANDARDS

- A. ASTM C 475/C 475M - Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board; 2002. (Reapproved 2007).
- B. ASTM C 840 - Standard Specification for Application and Finishing of Gypsum Board; 2011.
- C. ASTM C 1396/C1396M - Standard Specification for Gypsum Board; 2011.
- D. ASTM E72 - Standard Test Methods of Conducting Strength Tests of Panels for Building Construction; 2005.
- E. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2013a.
- F. GA-216 - Application and Finishing of Gypsum Board; Gypsum Association; 2010.
- G. GA-600 - Fire Resistance Design Manual; Gypsum Association; 2009.
- H. UL (FRD) - Fire Resistance Directory; Underwriters Laboratories Inc.; current edition.

1.4 SUBMITTALS

- A. Refer Section 01 33 00 for submittal requirements including but not limited to the following:
 - 1. Product Data: Provide manufacturer's data on partition head to structure connectors, showing compliance with requirements.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Company specializing in performing gypsum board application and finishing, with minimum three (3) years of documented experience.

PART 2 PRODUCTS

2.1 GYPSUM BOARD ASSEMBLIES

- A. Provide completed assemblies complying with ASTM C840 and GA-216.
- B. Fire Rated Assemblies: Provide completed assemblies complying with applicable code.
- C. Gypsum Association File Numbers: Comply with requirements of GA-600 for the particular assembly.

2.2 BOARD MATERIALS

- A. Manufacturers:
 - 1. CertainTeed Corporation.

2. Georgia-Pacific Gypsum.
 3. National Gypsum Company.
 4. USG Corporation.
 5. Or accepted.
- B. Gypsum Wallboard: Paper-faced gypsum panels as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut. Provide completed assemblies complying with ASTM C840 and GA-216.
1. Regular Type:
 - a. Application: Use for vertical surfaces and ceilings.
 - b. Thickness: 1/2 inch to match existing adjacent surfaces.
 - c. Edges: Tapered.
 2. Fire Resistant Type: Complying with Type X requirements; UL or WH rated.
 - a. Application: Use for vertical surfaces and ceilings.
 - b. Thickness: 5/8 inch to match existing adjacent surfaces.
 - c. Edges: Tapered.
 3. Joint Treatment: ASTM C474 and ASTM C840, 3-coat system, paper or fiberglass tape.

2.3 ACCESSORIES

- A. Nails and screws of type and size to suit application; to rigidly secure materials in place.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that field conditions are acceptable and are ready to receive work.
- B. In the event of any discrepancies between job site conditions and the drawings, stop work immediately. Immediately contact the Owner and report the nature, extent and impact of the discrepancy. Do not proceed with any and all work relating to the discrepancy until a resolution has been attained.
- C. If substrate preparation is the responsibility of another installer, notify Owner of unsatisfactory preparation before proceeding.
- D. Commencement of construction or installation means acceptance of existing conditions by Contractor as suitable for construction or installation.
- E. Any work which is not acceptable due to a discrepancy which has not been called to the attention of the Owner shall be repaired or replaced to conform to the original intent of the drawings at no additional cost to the Owner.

3.2 GYPSUM BOARD INSTALLATION

- A. Comply with ASTM C 840, GA-216, and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations.
- B. Fire-Rated Construction: Install gypsum board in strict compliance with requirements of assembly listing.

3.3 INSTALLATION OF TRIM AND ACCESSORIES

- A. Corner Beads: Install at external corners, using longest practical lengths.

3.4 JOINT TREATMENT

- A. Finish gypsum board in scheduled areas in accordance with levels defined in ASTM C 840.
- B. Level 4: Walls and ceilings to receive paint finish or wall coverings, unless otherwise indicated.

- C. Tape, fill and sand exposed joints, edges and corners to produce smooth surface ready to receive finishes.
- D. Feather coats of joint compound so that camber is maximum 1/32 inch.

3.5 TOLERANCES

- A. Maximum Variation of Finished Gypsum Board Surface from True Flatness: 1/8 inch in 10 feet in any direction.

3.6 CLEANING AND PROTECTION

- A. Clean soiled surfaces with cleaning solution.
- B. Touch-up, repair or replace damaged products / materials / connections before Substantial Completion.
- C. Protect installed products until completion of project.

END OF SECTION

PART 1 - GENERAL

1.1 GENERAL

- A. The Fire Alarm System for this project shall be a Silent Knight Brand System.**
- B. Substitutions of the specified Fire Alarm will be not be allowed.
- C. The scope of this project Includes, but not limited to, the following:
 - 1. Replace the existing fire alarm system in its entirety. All panels, devices, and wire shall be completely demolished and replaced.
 - 2. The existing system is to remain operational at all times until the new system is installed, tested, and approved by the authority having jurisdiction. Once the new system is approved, the existing system shall be demolished. At no time shall any existing wires be connected to the new fire alarm control panel(s).
 - 3. Read the accompanying documents which include the Eastridge House Fire Alarm Code Analysis and the Eastridge House Site Assessment Report.
 - 4. Provide all material, labor, equipment, design, and services necessary to perform the replacement and installation of a complete, fully operational, intelligent (analog) and addressable (digital), low voltage 24 Volts D.C., point identification, microprocessor-based Fire Alarm System, in accordance with the required and advisory provisions of the latest edition of N.F.P.A. #72 accepted by the Authority having Jurisdiction (City of Issaquah/Eastside Fire), project specifications, Eastridge House Fire Alarm Code Analysis Eastridge House Site Assessment Report, except as modified herein.
 - 5. The Contractor is to obtain a permit and final approval from (City of Issaquah/Eastside Fire) for the Fire Alarm System(s). All permits, fees for plan review, inspections, testing, etc. shall be included in the bid proposal.
 - 6. The Fire Alarm System Contractor shall simultaneously submit "Shop Drawings", Back-up Battery Calculations, Voltage Drop Calculations, Manufacturers Data Sheets, and a bond copy of each proposed Graphic Map to the local Authority Having Jurisdiction and Owner for review that shall be approved by the Architect/Engineer prior to the purchase, fabrication, or installation of any system components as detailed in Paragraph 1.18 of Specification Section 283100.
- D. By submitting a bid, the Fire Alarm System Contractor is acknowledging that he has made a thorough examination of the Contract Documents, existing site, and building conditions. By submitting a bid, the Fire Alarm System Contractor is acknowledging that they have determined that these documents do sufficiently describe the scope of construction work and have included all items required under this Contract.

1.2 RELATED DOCUMENTS

- A. Drawings, General Conditions and Supplementary Conditions of the Contract, including the Scope of Work and Division 1 Specification Sections apply to work of this Division.

1.3 CODES AND STANDARDS

- A. Codes and agencies having jurisdictional authority over Fire Alarm System installations.
 - 1. International Building Code – Latest Adopted Edition.
 - 2. International Mechanical Code – Latest Adopted Edition.
 - 3. International Fire Code – Latest Adopted Edition.
 - 4. Authority Having Jurisdiction (Local Fire Marshal).

5. Occupational Safety and Health Administration (OSHA).
 6. Washington Industrial Safety and Health Act (WISHA).
 7. National Fire Protection Association (N.F.P.A.).
 8. ANSI-J-STD-607-A Commercial Building Grounding and Bonding Requirements for Telecommunications.
 9. Americans with Disabilities Act (ADA).
 10. State of Washington Electrical Code.
 11. State of Washington Administrative Code (WAC).
 12. State of Washington Labor & Industry (L&I).
 13. Revised Code of Washington (RCW).
 14. American Society for Testing and Materials.
 15. National Board of Fire Underwriters.
 16. National Electrical Safety Code.
 17. National Electrical Manufacturers Association.
 18. Electrical Testing Laboratories.
 19. U.L. Fire Protection Equipment Directory.
 20. Underwriters Laboratories Incorporated (U.L.):
 - a. UL #5 Standard for Surface Metal Raceways and Fittings
 - b. UL #38 Standard for Manual Signaling Boxes for Fire Alarm Systems
 - c. UL #50 Enclosures for Electrical Equipment, Non-Environmental Considerations
 - d. UL #228 Standard for Door Closers-Holders, With or Without Integral Smoke Detectors
 - e. UL #268 Smoke Detectors for Fire Alarm Systems
 - f. UL #268 A Standard for Smoke Detectors for Duct Application
 - g. UL #346 Standard for Waterflow Indicators for Fire Protective Signaling Systems
 - h. UL #464 Standard for Audible Signal Appliances
 - i. UL #497 A Standard for Secondary Protectors for Communications Circuits
 - j. UL #521 Standard for Heat Detectors for Fire Protective Signaling Systems
 - k. UL #827 Standard for Central-Station Alarm Services
 - l. UL #864 Standard for Control Units and Accessories for Fire Alarm Systems
 - m. UL #1449 Standard for Surge Protective Devices
 - n. UL #1481 Standard for Power Supplies for Fire-Protective Signaling Systems
 - o. UL #1971 Standard for Signaling Devices for the Hearing Impaired
 - p. UL #2075 Standard for Gas and Vapor Detectors and Sensors
- B. In the event of a conflict between this statement of work and the drawings or specifications, the statement of work shall govern over specifications and drawings, and the specifications shall govern over the drawings.

1.4 DEFINITIONS

- A. Thermal Envelope: The heat flow control layer (insulation for example) that separates the interior conditioned space from the exterior unconditioned space.

- B. Cold Space: Spaces outside of the building's thermal envelope in which ambient temperatures are expected to be below 40°F.
- C. Warm Space: Spaces within the building's thermal envelope in which ambient temperatures are not expected to be below 40°F.
- D. Finished Spaces: Spaces used for habitation or occupancy where rough surfaces are plastered, paneled, or otherwise treated to provide a pleasing appearance.
- E. Unfinished Spaces: Spaces used for storage or work areas, such as sprinkler riser rooms, mechanical rooms, electrical rooms, etc., where appearance is not a factor.
- F. Exposed: Open to view i.e. a room that is not covered by other construction.
- G. Concealed Spaces: Spaces out of sight i.e. above ceilings, below floors, between double walls, furred-in areas, pipe and duct shafts, and similar spaces.
- H. Trades: Design documents or work performed by architectural, civil, electrical, fire protection, landscape, mechanical, plumbing, electrical, and structural.
- I. Soffit: A ceiling that is secondary to the primary ceiling elevation that is at a lower elevation and is finished with gypsum wall board or other construction materials.
- J. Provide: It shall be interpreted as "furnishing and installing complete in operating condition".
- K. Drawings: It shall be interpreted as "all Contract Drawings for all Disciplines".

1.5 GENERAL SYSTEM REQUIREMENTS

- A. It is the intention of this division of the specifications and the accompanying drawings to describe and provide for the furnishing, installing, testing and placing in satisfactory and successful operation all equipment, materials, devices and necessary appurtenances to provide a complete electrical & fire alarm system, together with such other miscellaneous installations and equipment hereinafter specified and/or shown in the plans and analysis. The work shall include all materials, appliances and apparatus not specifically mentioned herein or noted on the plans, but which are necessary to make a complete working installation of all electrical systems shown on the plans or described herein.
- B. Provide and install a new complete, fully operational, intelligent (analog) and addressable (digital), low voltage 24 Volts D.C., "Class B", point identification, microprocessor-based Fire Alarm System that will transmit a signal to the monitoring entity as described herein and as shown on the contract documents.
- C. The Fire Alarm System shall include, but not be limited to a control panel, remote power supplies, peripherals, initiating devices, notification appliances, cabling, conduit, junction boxes, fittings, raceways, termination at field devices and panels, etc. required for a complete operating system even though each item may not be specifically mentioned or described in this specification section or on the contract documents.
- D. Devices and equipment for Fire Alarm System service shall be U.L. listed or Factory Mutual Global approved for use in Fire Alarm Systems and of the manufacturer's current model.
- E. The Fire Alarm Control Panel shall be listed under U.L. Category UOJZ as a single control unit and shall be U.L. Listed for Power Limited Applications per Article 760 of N.F.P.A. #70 (National Electrical Code).
- F. The Fire Alarm Control Panel shall electrically supervise and monitor the integrity of all conductors of all circuits.
- G. The Fire Alarm System Control Panel and peripheral devices shall be manufactured 100% by a single U.S. manufacturer (or division thereof).

- H. The Fire Alarm shall be of modular design to facilitate both expansion and service.
- I. The system shall be an active/interrogative type system where each addressable device is repetitively scanned, causing a signal to be transmitted to the Fire Alarm control panel indicating that each device, and associated circuit cabling, is functional.
- J. All power or system shutdowns shall be coordinated with the Owner or Owner's representative with a minimum of (7) days advanced notice not exceeding four (4) hours. Provide temporary provisions for periods greater than four (4) hours with Lockout / Tagout procedures being used.
- K. Equipment in compliance with U.L. standards but not bearing their label is not acceptable.

1.6 PROTECTION OF NEW FIRE ALARM EQUIPMENT

- A. The Fire Alarm System Contractor shall store and guard all equipment before installation and shall protect same, and replace any equipment that has been damaged prior to final acceptance.

1.7 HOUSEKEEPING

- A. All electrical materials shall be kept stored in an orderly fashion protected from heat, cold, and the weather.
- B. All marred surfaces shall be refinished and painted after installation.
- C. All debris shall be removed from premises during work, as directed, and at completion of job.

1.8 COORDINATION

- A. The work covered by this Specification Section shall be coordinated with the related work as specified elsewhere on the contract documents or in the project specifications.
- B. The Fire Alarm System Contractor shall participate in the on-site coordination meetings to coordinate the Fire Alarm System installation with the Architectural features, HVAC grilles, electrical lights, fire protection sprinkler heads, and/or existing conditions.
- C. Coordination meetings shall consider elevations, required clearances, and routings of all trades to assure that all trades can be installed without conflict.
- D. The outcome of this coordination shall allow each system (Electrical, Mechanical, Fire Protection, etc.) to be installed without further conflicts for space or locations.
- E. Failure to coordinate with other trades and/or existing conditions that result in the removal and re-installation of systems shall not be charged as additional costs.

1.9 PENETRATIONS

- A. Fire Resistance Rated Penetrations:
 - 1. Where Fire Alarm System conduit penetrates a fire resistance rated wall or floor assembly, the Fire Alarm System Contractor shall provide a fire rated penetration that maintains the integrity and fire resistance rating of the assembly being penetrated.
 - 2. The fire resistance rated penetrations of walls or floor assemblies shall consist of one of the following:
 - a. Cabling in Conduit: Fire Alarm System cabling installed in conduit shall be provided with sealant between the conduit and the wall or floor penetration
 - b. Exposed Cabling: Fire Alarm System cabling installed exposed shall be provide with a section of conduit (sleeve) that extends past both faces of the penetration by a minimum distance of 6". Seal both ends of conduit (sleeve) with U.L listed or Factory Mutual Global approved material and sealant that maintains the fire resistance rating of the

assembly being penetrated. Provide fire resistance rated sealant to both sides of assembly penetration between the conduit (sleeve) and the wall or floor assembly.

- c. Exposed Cabling: Fire Alarm System cabling installed exposed shall be provide with a fire resistance rated grommet that maintains the fire resistance rating of the assembly being penetrated, such as those manufactured by Specified Technologies Incorporated (STI). The grommet shall slipover the cabling and snap together to form a round grommet that can slide into the penetration. A separate grommet shall be required for each side of the assembly.
- B. Non-Fire Resistance Rated Penetrations:
1. The Non-fire resistance rated penetrations of walls or floor assemblies shall consist of one of the following:
 - a. Cabling in Conduit: Fire Alarm System cabling installed in conduit shall not require additional sealant between the conduit and the wall or floor penetration.
 - b. Exposed Cabling: Fire Alarm System cabling installed exposed shall be provide with a section of conduit (sleeve) that extends past both faces of the penetration by a minimum distance of 6". Additional Sealant shall not be required.
 - c. Exposed Cabling: Fire Alarm System cabling installed exposed shall be provide with a Non-fire resistance rated grommet, such as those manufactured by Specified Technologies Incorporated (STI). The grommet shall slipover the cabling and snap together to form a round grommet that can slide into the penetration. A separate grommet shall be required for each side of the assembly.
- C. Smoke Barrier/Partition Penetrations:
1. Where Fire Alarm System conduit penetrates a smoke barrier/partition wall or floor assembly, the Fire Alarm System Contractor shall provide a smoke barrier/partition penetration that prevents the passage of smoke through the assembly being penetrated.
 2. Smoke barrier/partition penetrations of walls or floor assemblies shall consist of one of the following:
 - a. Cabling in Conduit: Fire Alarm System cabling installed in conduit shall be provided with sealant between the conduit and the wall or floor penetration.
 - b. Exposed Cabling: Fire Alarm System cabling installed exposed shall be provide with a section of conduit (sleeve) that extends past both faces of the penetration by a minimum distance of 6". Seal both ends of conduit (sleeve) with U.L listed or Factory Mutual Global approved material and sealant that prevents the passage of smoke. Provide sealant between the conduit (sleeve) and the wall or floor assembly on both sides of assembly penetration.
 - c. Exposed Cabling: Fire Alarm System cabling installed exposed shall be provide with a Non-fire resistance rated grommet, such as those manufactured by Specified Technologies Incorporated (STI). The grommet shall slipover the cabling and snap together to form a round grommet that can slide into the penetration. A separate grommet shall be required for each side of the penetration.
- D. All firestop systems shall be installed in accordance with the manufacturer's recommendations and shall be completely installed and available for inspection by the local authorities prior to cabling system acceptance.
- E. Refer to Division 07 for requirements on sealing of penetrations.
- F. The Fire Alarm System Contractor shall minimize the quantity of penetrations through the air barrier. All penetrations shall be filled with a spray type foam insulation or other approved means to maintain the integrity of the air barrier. The ends of seismic brace members that penetrate the air barrier shall also be filled with a spray type foam insulation of other approved means to maintain the integrity of the air barrier.

- G. The Fire Alarm System and Electrical drawings do not specifically identify penetrations through walls, floors, platforms, and foundations.
- H. The Fire Alarm System Contractor shall review all architectural and structural drawings to determine all penetration locations.
- I. All penetration locations through walls, floors, platforms, and foundations shall be coordinated with the General Contractor and all other trades.
- J. All penetrations through walls, floors, platforms, and foundations are the responsibility of the Fire Alarm System Contractor.

1.10 CUTTING AND PATCHING

- A. Obtain permission from the General Contractor and Owner's Representative prior to cutting. Locate cut locations so they will not weaken structural components the minimum amount necessary. See Division 01 specifications for further requirements and limitations.
- B. All construction materials damaged or cut into during the installation of the Fire Alarm System shall be repaired or replaced with materials of like kind and quality by skilled labor experienced in that particular building trade.

1.11 SYSTEM/DEVICE INTERFACE CONNECTIONS

- A. The following system/device interfaces shall be connected to the Fire Alarm System for auxiliary functions initiated by the Fire Alarm System Control Panel and includes, but is not limited to:
 - 1. Smoke and Fire/Smoke Dampers
 - 2. Duct Smoke Detectors
 - 3. HVAC Systems
 - 4. Magnetic Door Holders
 - 5. Magnetic Door Releases
 - 6. Fire Protection Sprinkler Systems
 - 7. Elevator Systems

1.12 SITE INSPECTIONS OF EXISTING BUILDINGS OR SITE CONDITIONS PRIOR TO BIDDING

- A. The Fire Alarm System Contractor shall examine the structure, building, and existing conditions under which Division's 28 work is to be installed for conditions detrimental to proper and timely completion of the work before submitting proposals and/or bids for this work.
- B. No subsequent allowance for time or costs will be considered for any consequence related to failure to examine site conditions.
- C. Existing site conditions may not be fully depicted on the contract documents and is the bidding Fire Alarm System Contractor's responsibility to fully understand the existing conditions of the project.

1.13 CONTRACT DOCUMENTS

- A. Fire Alarm system contract drawings or documents are not a complete design or 100% layout and are simply conceptual. This layout identifies proposed locations of panels and key critical aspects of the fire alarm system. They are meant to provide a guide for coordinating architectural, electrical, and mechanical features of the building design and to aid the NICET designer in creating shop drawings in accordance with NFPA 72, state & local requirements. The contractors and the fire alarm system designer shall coordinate the exact quantities and locations of all system components between trades and/or existing conditions.
- B. The Fire Alarm System contract documents are not intended to serve as working drawings. They are diagrammatic and unless specifically dimensioned or detailed, does not indicate all fittings, hardware or appurtenances required for a complete operating installation. It is the Fire Alarm System contractor's responsibility to provide devices that may not be indicated or shown on the contract documents for a fully functional system.
- C. Wiring diagrams are not intended to indicate the exact course of raceways or exact location of device. Raceway and device locations are approximately correct and are subject to revision as may be necessary or desirable at the time of installation. Precise location in every case shall be subject to the Owner's approval.
- D. The Fire Alarm System contractor shall be responsible for reviewing all architectural, civil, electrical, mechanical, plumbing, structural, and fire protection drawings. These drawings may contain information related to the design and construction of this project and it is the Fire Alarm System contractor's responsibility to review the contract documents of all trades and to coordinate the contract documents with the Fire Alarm System "Shop Drawings".
- E. Architectural and Electrical drawings take precedence over Fire Alarm drawings.
- F. The Fire Alarm System installation shall be developed in accordance with the contract documents, project specifications, and applicable standards. Should a conflict occur between the contract documents and project specifications, the project specifications shall prevail, refer to Division 1.
- G. In the case that criteria contained on the contract documents is omitted from the project specifications or the project specifications have criteria that is omitted from the contract documents, the criteria given in one location shall apply as if shown in both the contract documents and in the project specifications (what's in one document applies to both documents). The contract documents and project specifications are complementary and what is called for in either is binding as if called for in both.
- H. Fire Alarm System Work shall be as defined in the contract documents and in this specification Section. Any details beyond these limits are meant only to give installation clarity to that portion which is a part of this Contract.

1.14 SHOP DRAWINGS

- A. Prepare detailed working drawings for the system layout in accordance with N.F.P.A. #72 and the following:
 - 1. Shop Drawing Requirements: The Installing Vendor's/Contractor's complete and full-size set of Shop Drawings shall be issued in the following format:
 - a. They shall be clear and legible.
 - b. The same sheet size as the Contract Drawings where provided (min. size 24" x 36").
 - c. A minimum of 1/8" text height shall be used for all text, symbol text, and subscript text.
 - d. Scale of Drawings
 - 1) Any Site plan drawings shall be the same scale as issued in the Contract Documents.
 - 2) Floor plan drawings shall be 1/8"=1'-0", unless directed to do otherwise.

- e. The Electrical Legend, Wire Legend, Load and Battery Calculations, Riser Diagram, Sequence of Operation Info, Wiring Details, and Mounting Details shall precede the Site Plans and Floor Plans.
 - f. All sheets, including the cover, shall include a title block along the edge of each of the drawings that, when the drawings are rolled up, the following information shall be visible:
 - 1) The system-specific sheet number
 - 2) Project name, specification section number and section title name
 - 3) Floor name, area, and/or section of the building (Use the name of the area and/or floor description that is on the Contract Drawings.)
 - g. Architectural information on the Contract Drawings shall be included on the Installing Vendor's/Contractor's Shop Drawings, including, but not limited to: match lines, grid lines, grid bubbles, key plan, and enlarged floor plans.
- B. All items contained in Section 7.4 "Shop Drawings" of the latest edition of N.F.P.A. #72 adopted by the Authority Having Jurisdiction shall be included on the Fire Alarm System Shop Drawings including, but not limited to the following:
1. Sheet Index.
 2. Fire Alarm System Component Legend.
 3. Cabling Legend.
 4. Alpha-numeric labeled cables based upon the "Cabling Legend" for each cable type and cable run.
 5. Electrical Legend listing the electrical devices to be utilized as part of the Fire Alarm System installation.
 6. Site Plan.
 7. Floor Plans indicating all Fire Alarm System devices.
 8. End-Of-Line Resistor(s) where applicable.
 9. Device Address shown adjacent to each device.
 10. One-Line Riser Diagram.
 11. "Sequence of Operations" matrix indicating all system Inputs and Outputs.
 12. Mounting details and mounting heights.
- C. Provide "Shop Drawings" that are usable for trouble-shooting purposes showing equipment/device locations, conduit routing, junction boxes, connection cabling for the entire Fire Alarm System layout, and riser diagrams.
- D. Shop Drawings shall be clear and legible with a minimum text height of 1/8" for all text.
- E. A graphical scale shall be provided for each floor plan or detail on the shop drawings in accordance with N.F.P.A. #72.
- F. Projects that require more than one sheet to show the entire Fire Alarm System shall require a key plan.
- G. The key plan shall identify the location of the Fire Alarm System that is contained on that sheet and shall contain a reference north arrow.
- H. All sheets that contain a break in the building background shall contain a "Match Line" designation to indicate where the building and Fire Alarm System continues, even if on the same sheet.

- I. One-Line Riser Diagram shall show all field devices and their respective room names, room numbers, device address, device designation and candela settings in the order wired on the floor plans. Per N.F.P.A. #72, a riser diagram is required to show the type and number of system components/devices on each circuit and the number of conductors for each circuit. Since a circuit is defined in N.F.P.A. #72 as a connection path between locations, the riser diagram should show the order that devices are connected.

1.15 BUILDING EXPANSION, SEPARATION, OR SEISMIC JOINTS

- A. The Fire Alarm System Contractor shall provide a junction box on each side of the Building Expansion, Separation, or Seismic joint.
- B. The Fire Alarm System Contractor shall provide a section of flexible conduit between the junction boxes of sufficient length to accommodate for the calculated building movement.
- C. The Fire Alarm System Contractor shall provide grounding bushings with #12 grounding cable to maintain continuity between junction boxes. Grounding cable shall be of sufficient length to accommodate for the calculated building movement.
- D. The Fire Alarm System Contractor shall secure flexible conduit and grounding cable on each side of the Building Expansion, Separation, or Seismic joint.

1.16 SUBMITTALS

- A. Product substitution during installation from the approved Equipment Submittals will not be allowed and shall result in the removal and re-installation of system components at no additional cost to the Owner.
- B. Fire Alarm System equipment submittals, shop drawing submittals, back-up battery calculations, voltage drop calculations, and graphic maps shall be submitted together at one time as listed below.
- C. Equipment Submittals for the Fire Alarm System shall be submitted to the Owner for review and approval within 30 calendar days from the date of the Contract signing by the General Contractor.
- D. All remote power supply locations deemed necessary by the Fire Alarm System Contractor shall be submitted for review and approval.
- E. "Shop Drawings", Back-up Battery Calculations, Voltage Drop Calculations, and the Graphic Map(s) for the Fire Alarm System shall be submitted to the Owner for review and approval within 30 calendar days from the date of the Contract signing by the General Contractor.
- F. Graphic Maps shall be submitted for review and approval within 30 calendar days from the date of the Contract signing by the General Contractor.
- G. Equipment Submittals shall contain original brochures supplied by manufacturers (Photocopies of originals will not be accepted). Each type of device provided shall be identified in the Equipment Submittals using the same identification as shown on the drawings and specifications. The information included must be the exact equipment to be installed, not the complete "line" of the manufacturer. Where sheets show the equipment installed and other equipment, the installed equipment shall be neatly and clearly identified on such sheets.
- H. Submittals shall be delivered electronically. The Fire Alarm System Contractor shall provide the following:
 1. Submittal Drawings:
 - a. The Submittal Drawings shall be a single PDF that is formatted to actual contract drawings size (not 11x17) and collated in numerical order as designated in the title block of each drawing. Shop drawing submittals shall include the following information:
 - 1) Floor plans identifying all Fire Alarm System components and devices.

- 2) Cabling / conduit routing and sizing.
 - 3) Sequence of operations
 - 4) Fire Alarm System zoning.
 - 5) Point to point cabling diagrams.
 - 6) One-line risers.
 - 7) Back-up Battery Calculations.
 - 8) Voltage Drop Calculations.
 - 9) Graphic Map Details / Artwork.
2. Equipment Submittals:
 - a. The Equipment Submittal shall be a single PDF.
 - b. The Equipment Submittal PDF shall contain all equipment, devices, and components that are collated for printing on 8½"x11" sized paper.
 - c. The Equipment Submittal PDF shall be a searchable document.
 - d. The Equipment Submittal PDF shall be formatted for duplex printing with blank sheet inserted where necessary.
 - e. The Equipment Submittal PDF shall contain a "Table of Contents" that indicates all pieces of equipment, devices, and components. Equipment submittals shall be broken up by "Tabbed Dividers" that shall include, at a minimum, the following:
 - 1) Fire Alarm System Control Panel.
 - 2) Fire Alarm Remote Annunciator Panels.
 - 3) Power Supplies.
 - 4) Initiating Devices.
 - 5) Notification Appliances.
 - 6) Graphic Maps.
 - 7) Modules.
 - 8) Miscellaneous Equipment.
 - f. The Equipment Submittal PDF shall be bookmarked by "Tabbed Divider" and for each piece of equipment, device, and component.
 3. Back-Up Battery Calculations and Voltage Drop Calculations that are submitted as part of the Equipment Submittal PDF shall be formatted to the following:
 - a. Calculations shall be included at the end of the Equipment Submittal PDF under a separate "Tabbed Divider" for both Back-Up Battery Calculations and the Voltage Drop Calculations.
 - b. The Equipment Submittal "Table of Contents" shall also indicate all calculations being provided for both the Back-Up Battery and the Voltage Drop Calculations
 4. Back-Up Battery Calculations and Voltage Drop Calculations that are submitted as a separate PDF from the Equipment Submittal PDF:
 - a. The single Back-Up Battery Calculations and Voltage Drop Calculations submittal PDF shall contain all calculations that are collated for printing on 8½"x11" sized paper.
 - b. The Back-Up Battery Calculations and Voltage Drop Calculations submittal PDF shall be a searchable document.
 - c. The Back-Up Battery Calculations and Voltage Drop Calculations submittal PDF shall be formatted for duplex printing with blank sheet inserted where necessary.
 - d. The Back-Up Battery Calculations and Voltage Drop Calculations submittal PDF shall contain a "Tabbed Divider" to separate the Back-Up Battery Calculations from the Voltage Drop Calculations.
 - e. The Back-Up Battery Calculations and Voltage Drop Calculations submittal PDF shall contain a "Table of Contents" that indicates all calculations contained within each "Tabbed Divider".
 - f. The Back-Up Battery Calculations and Voltage Drop Calculations submittal PDF shall be bookmarked by "Tabbed Divider" and for each Back-Up Battery Calculation or Voltage Drop Calculation.

5. Graphic Maps:
 - a. Graphic Maps shall be submitted in a PDF that is full sized to allow printing of actual sized proposed Graphic Maps.
- I. Review of Fire Alarm System submittal by the Owner does not relieve the Contractor of responsibility for compliance with the intent of all contract documents and / or code.
- J. Any material found to be installed without prior approval will be required to be removed and replaced with only specified approved material at Contractor's cost.
- K. The contract documents (if provided) shall not be used as the Fire Alarm System Contractor's Shop Drawings.
- L. The Fire Alarm System Shop Drawings shall be system specific with only Fire Alarm System equipment and connections to other equipment that will be interfaced to the Fire Alarm System being shown.
- M. All re-submittals shall have the areas of revision clearly marked with revision clouds.
- N. Upon receiving a review letter rejecting any portion of the Fire Alarm System submittal, the Fire Alarm System Contractor shall resubmit within 7 calendar days.

1.17 CERTIFICATION AND LICENSING

- A. The Fire Alarm System shall:
 1. Be manufactured by an ISO 9001 certified company.
 2. Meet the requirements of BS EN9001: ANSI/ASQC Q9001-1994.
 3. Shall bear the marking for a U.L. Listed UOJZ control unit.
- B. The Fire Alarm System Contractor shall:
 1. Be currently listed and approved by Underwriters Laboratories Incorporated with a Certificate Service for Protective Signaling Services – Local, Auxiliary, Remote Station.
 2. Be currently listed and approved by Underwriters Laboratories Incorporated for “Proprietary Protective Signal System Listing Program” with a UUJS certificate of compliance.
 3. Be a certified Level III technician by National Institute for Certification in Engineering Technologies (NICET) in the Fire Alarm Technology subfield of fire protection engineering technology.
- C. At the request of the Owner, the Fire Alarm System Contractor shall provide:
 1. UL certificate specific to this installation.
 2. Proof of all Certificates and Listings
- D. Fire Alarm System Shop Drawings shall be designed by one of the following (provide a copy of documentation):
 1. NICET Level III Certified Designer.
 2. Registered Professional Fire Protection Engineer.
- E. The Installing Fire Alarm System Contractor shall employ a minimum of NICET Level II technicians to:
 1. Provide and/or perform on site installation assistance throughout the duration of the project, up to and including acceptance of the Fire Alarm System by the Authority Having Jurisdiction.
 2. Oversee the final check-out and to ensure systems integrity.
 3. Trim and program the Fire Alarm System Control Panel.

- F. Certificates issues by any company not directly associated with the installation of this project will be rejected
- G. The installing Contractor shall have a minimum of fifteen (15) years' experience in the design, installation, servicing, and testing of the Fire Alarm System to be installed. A list of installations of a similar nature and scope shall be provided on request.

1.18 COMPETITIVE PRODUCTS

- A. Any reference in the specifications to any article, device, product, material, fixture, form or type of construction by name, make or catalog number shall be interpreted as establishing a standard of quality and shall not be construed as limiting competition.
- B. The Fire Alarm System Contractor, in such cases, may at his option use any article, device, product, material, fixture, form or type of construction which in the judgment of the Owner, expressed in writing, is equal to that specified.

1.19 REQUESTS FOR INFORMATION (RFI)

- A. It is our intent to provide a timely response to any Request for Information (RFI) regarding the Fire Alarm System work. To further expedite this process, if a suggestion can be determined or derived at by the initiator of the Request for Information (RFI), this suggestion shall be supplied with the submitted Request for Information (RFI). If no suggestion is given where one is possible, the RFI will be returned as incomplete.
- B. All Fire Alarm System Request for Information (RFI) questions shall be written on the forms provided in Division 0 or 1 of the General and Supplemental Conditions of the Project Manual.

1.20 QUALITY ASSURANCE

- A. All devices, components, and equipment of the Fire Alarm system shall be listed as a product of a single Fire Alarm system manufacturer under the appropriate category by Underwriters' Laboratories, Inc. (UL), shall bear the UL label, and shall be listed under UL category UOJZ as a single control unit.
- B. Partial or pending listings for a Fire Alarm system or components is not acceptable.
- C. The Fire Alarm system installation shall comply with Article 760 of N.F.P.A. #70 with all circuits being marked in accordance with Article 760-30, 760-176, and 760-179.
- D. Requirements of Regulatory Agencies:
 - 1. Perform work in accordance with applicable Codes.
 - 2. In case of differences between building codes, state laws, local ordinances, utility company regulations, and Contract Documents, the most stringent shall govern.

1.21 OPERATIONS AND MAINTENANCE MANUAL

- A. Bind Operation & Maintenance Manual for the Fire Alarm System in a single three-ring tabbed hard-backed binder with clear plastic pocket on spine. Spine of each binder shall have following typewritten lettering inserted:

OPERATION
AND
MAINTENANCE
MANUAL
FIRE ALARM SYSTEM

- B. The Operations and Maintenance Manuals shall include a complete materials list of the Fire Alarm system including the addresses and phone numbers of local sources of replacement parts.

- C. Operation and Maintenance manuals shall contain the following:
1. "As-Built" Shop drawings.
 2. Cabling diagrams.
 3. Operation and Maintenance instructions.
 4. Replacement parts lists.
 5. Manufacturer's equipment submittal literature for all components.
 6. Typewritten "Sequence of Operations".
 7. Thorough testing procedures.
 8. Recommended testing frequency for each item.
 9. Acceptance Test certificates.
- D. Operation and Maintenance Binders:
1. Binders shall be commercial quality, 8-1/2 x 11-inch (3) D-ring binders.
 2. Binders shall have durable plastic covers with clear pockets on the cover and spine to hold labels.
 3. Binders shall have a 1" minimum and 3" maximum ring size.
 4. Binders shall not be filled more than 2/3 of its capacity to accommodate future revisions.
 5. Where two or more binders are necessary to accommodate data, correlate data in each binder into related groupings according to the project manual table of contents. Cross reference other binders where necessary to provide essential information for proper operations and maintenance of each piece of equipment.
- E. Operation and Maintenance manuals shall contain the following:
1. Cover: Identify each binder with a typed or printed title.
 2. Project Directory: Name, address, and phone number of Architect, General Contractor, and Electrical Subcontractors. Also include complete list of equipment installed with name, address, and phone number of each vendor.
 3. Table of Contents: List every item separated by a divider, using the same identification as on the divider tab.
 4. Dividers: Provide heavy paper dividers with printed tabs for each section. Immediately following the divider tab include a description of product.
 5. Typewritten Operation and Maintenance instructions.
 6. Complete replacement parts list with part numbers.
 7. Manufacturer's equipment submittal literature for all components used in the system.
 8. Typewritten "Sequence of Operations".
 9. Thorough testing procedures.
 10. Recommended testing frequency for each item.
 11. Acceptance Test Certificates.
 12. Copy of "As-Built" drawings.
 - a. Where oversized drawings are necessary, fold drawings to the same size as text pages and use as foldout.
 - b. If drawings are too large to be used practically as a foldout, place the drawing neatly folded in the front or rear pocket of the binder. Insert a typewritten page indicating drawing title, description of contents and drawing location in the appropriate location in the manual.

13. Warranties: Provide a copy of each warranty in the appropriate manual. Provide written data outlining the procedures to follow in the event of product failure.
14. Electronic copy of the final system program software. (USB Drive).
- F. Submit copies as specified by Division 1, and at a minimum, provide three (3) copies of Operation & Maintenance Manual to Owner to review prior to scheduling the training session. In addition to hardcopies, an identical electronic version of the Manual shall be provided as a single PDF file, divided and organized in the same manner as the hardcopies.
- G. Operation and Maintenance manuals shall contain original color printed brochures supplied by manufacturers (Photocopies originals will not be accepted).
- H. First section of the Operations and Maintenance Manual shall consist of name, address, and phone number of Architect, General Contractor, and Electrical Subcontractors. Also include complete list of equipment installed with name, address, and phone number of each vendor.
- I. The information included must be the exact equipment installed not the complete "line" of the manufacturer. Where sheets show the equipment installed and other equipment, the installed equipment shall be neatly and clearly identified on such sheets.
- J. Cabling Diagrams for each system shall be complete for the specific system installed under the Contract with typical "Cabling Diagrams" not being acceptable.

1.22 TRAINING MANUAL

- A. The Training Manual shall contain a Syllabus titled "Section 283100 Fire Alarm System – Training Syllabus".
- B. Prior to starting the training session, provide a quantity of up to ten (10) Training Manuals to the Owners staff.
- C. Each Training Manual shall be in its own 3-ring hard covered binder that shall be sized to allow for 20% additional documentation.
- D. The spine and front cover of each Training Manual shall have a clear cover with a typed insert with the following information:
 1. Labeled "Section 283100 Fire Alarm System – (*Eastridge House Apartments*) Training Manual".
 2. Site Name.
 3. Site Address.
 4. Project Name.
 5. Project address.
 6. Current Date.
 7. Installing Fire Alarm System Contractor.
 8. Installing Fire Alarm System Contractor's Address.
 9. Installing Fire Alarm System Contractor's Contact Name.
 10. Installing Fire Alarm System Contractor's Phone Number.
- E. Each Training Manual shall include the following:
 1. Use color coded numbered tabs to separate each item defined below and for each device that was installed.
 2. Provide a "Table of Contents" as the first page indicating each piece of equipment or device document.
 3. "Section 283100 Fire Alarm System – (*Eastridge House Apartments*) Training Syllabus".

4. Provide color copies of a power point presentation consisting of two slides per page that demonstrates typical functions and operational instructions of the new Fire Alarm System that shall consist of, but not limited to the following:
 - a. Step-by-step instructions of the most common features.
 - b. How to acknowledge and silence an "Alarm" condition.
 - c. How to acknowledge and silence a "Trouble" condition.
 - d. How to acknowledge and silence a "Supervisory" condition.
 - e. How to operate the "Drill" feature.
 - f. What to do when there is a "Dirty Detector" alert.
 - g. What to do when there is a loss of dialer communication alert.
 - h. How and when the Owners Maintenance Staff should call for help.
 - i. Include the Manufacturer's Software User's Manual.

1.23 WARRANTY LETTER

- A. Provide a "Certificate of Warranty" letter at the completion of the project. The date of "Substantial Completion" shall be clearly shown on the letter indicating when the warranty period begins.
- B. The "Certificate of Warranty" letter shall be signed by the Fire Alarm System contractor.
- C. The "Certificate of Warranty" shall be included as part of the Operation and Maintenance Manual. The date of "Substantial Completion" shall be the date indicated on the approved test certificate that was signed by the Authority Having Jurisdiction for system acceptance.
- D. The full cost of maintenance, labor, and materials required to correct any defect during this one-year period shall be included in the submittal bid.

TEST CERTIFICATES

1.24

- A. Completely fill out the Fire Alarm System "Record of Completion" documents contained within the latest adopted Edition N.F.P.A. #72 and provided to the Owner at completion of this project.
- B. Obtain the Authority Having Jurisdiction signature, printed name, date, and telephone number on the "Record of Completion" documents.
- C. Upon completion of the Fire Alarm System installation, testing, and Instruction & Training, the Installing Vendor shall provide the following Signed Test Forms:
 1. The signed original "Record of Completion".
 2. The signed original Fire Alarm System Permit.

1.25 OFF SITE MONITORING SERVICE AGREEMENT

- A. The Contractor shall provide central station monitoring, as part of a complete fully functional system, for the one-year warranty period, at which time the owner can reevaluate this service. Prior to completion of the project, the Fire Alarm System Contractor shall provide to the Owner, an agreement for the purpose of providing off-site monitoring services.

1.26 AS-BUILT DRAWINGS

- A. The Fire Alarm System Contractor shall maintain, in addition to any reference drawings, an "As-Built" set of drawings, which have been reproduced from the approved site set on which all deviations from the original design shall be drafted in a neat legible manner with red colored pencil.

- B. "As-Built" drawings shall clearly indicate the following:
 - 1. Actual routing of all raceways.
 - 2. Actual cable type, numbers, and routing.
 - 3. System cabling diagrams.
 - 4. Connection diagrams.
 - 5. Interface of all components in the system.
 - 6. Equipment and device locations.
 - 7. Final room names and numbers.
 - 8. Programming addresses assigned for all components.
- C. The room numbering system depicted in all graphics and referenced in data bases generated by the Fire Alarm System Contractor shall match that of the final signage and room identification system adopted by the Owner, unless specifically approved otherwise in writing by the Owner.
- D. The "As-Built" drawings shall show actual installation from all addenda items, change orders, field authorizations, design changes, installation modifications, etc.
- E. The Fire Alarm System Contractor shall update all references to specific products to indicate products actually installed on project.
- F. Upon completion of work, the Fire Alarm System Contractor shall deliver the red lined drawings and one set of neatly drafted "As-Built" drawings on electronic media in AutoCAD format to the Architect for the Engineer to review and accept prior to being forwarded to the Owner for their records.

1.27 PROGRAM SOFTWARE

- A. Following the completion of final system programming, the Fire Alarm System Contractor shall provide to the Owner an electronic copy of the final system program software and "Point Status Report".
- B. A hard copy of the "System Report" which documents the status of all active devices in the system shall also be provided.
- C. The software program shall be compatible with an IBM PC and provided with a verification software package.
- D. A report shall be generated of the test results and two hard copies submitted to the Owner for review.
- E. Provide no less than one (1) software upgrade and one (1) firmware upgrade at the end of the 1-year warranty period.

1.28 CLOSEOUT MATERIAL

- A. The Fire Alarm System close out material shall be submitted to the Owner.
- B. All close out materials shall be contained within a single 3-ring hard cover binder.
- C. The close out materials shall include the following at a minimum:
 - 1. Operations and Maintenance Manuals: See Paragraph 1.23 of this Specification Section for "Operations and Maintenance Manual" requirements.
 - 2. Training Manuals: See Paragraph 1.24 of this Specification Section for "Training Manual" requirements.
 - 3. Warranty Letters: See Paragraph 1.25 of this Specification Section for "Warranty Letter" requirements.

4. Test Certificates: See Paragraph 1.26 of this Specification Section for "Test Certificate" requirements.
5. Off-Site Monitoring Services Agreement: See Paragraph 1.29 of this Specification Section for "Off-Site Monitoring Service Agreement" requirements.
6. "As-Built" Drawings: See Paragraph 1.27 of this Specification Section for "As-Built" Drawing requirements.
7. Program Software: See Paragraph 1.28 of this Specification Section for "Program Software" requirements.
8. Spare Parts: See Paragraph 1.29 of this Specification Section for "Spare Parts" requirements.

1.29 WARRANTY SERVICE

- A. All Fire Alarm System equipment shall be of a single supplier and installed by an authorized factory distributor, having a local office located within 50 miles of the project site that is staffed with trained full-time employees who are capable of performing testing, inspections, repair, maintenance, and has the ability to provide prompt emergency services.
- B. For non-emergency service, response time of the technician to the site shall not exceed four (4) hours.
- C. Service calls received before 1:00 P.M. shall be provided that day and service calls received after 1:00 P.M. shall be the following business day.
- D. For emergency service, response time of the technician to the site shall not exceed two (2) hours in accordance with N.F.P.A. #72 Section 26.3.8.

1.30 BATTERY BACK-UP CALCULATIONS

- A. Battery Back-Up power shall be an integral part of the Fire Alarm System and shall automatically switch over upon the loss of AC power.
- B. It shall be the Fire Alarm System Contractor's responsibility to confirm that the proposed Fire Alarm system will meet or exceed the local Authority Having Jurisdiction (AHJ) requirements for Battery Back-Up power.
- C. At a minimum, provide battery Back Up power for the entire Fire Alarm system to provide 24 hours of standby operation immediately followed by a minimum of 5 minutes of alarm operation.
- D. Battery Back-up Calculations for each Control Panel and/or Power Supply shall indicate the following:
 1. "Standby" or Non-Active Mode: "Amp Draw" for each device, quantity of each device, and total "Amp Draw" load for each circuit of the Fire Alarm System Control Panel and/or Power Supply.
 2. "Alarm" or Active Mode: Individual "Amp Draw" of each device, quantity of each device, and total "Amp Draw" load in with all devices operating at the maximum load condition for each Control Panel and/or Power Supply.
 3. Total "Amp Draw" load required by each Control Panel and/or Power Supply for verifying selection of back-up batteries.
- E. For systems that include an Uninterruptible Power Supply (UPS), provide the maximum load allowed by the UPS manufacturer and list each item along with its maximum load that will be connected to the UPS.

1.31 VOLTAGE DROP CALCULATIONS

- A. Provide the Voltage Drop Calculations for each Fire Alarm System Control Panel and/or Power Supply circuit.
- B. Voltage Drop Calculations for each Fire Alarm System Control Panel and/or Power Supply circuit shall indicate the following:
 - 1. All devices on each circuit.
 - 2. Quantity of each device on each circuit.
 - 3. Cable length of each circuit.
 - 4. Gauge of cabling for each circuit.
 - 5. Total line loss for each circuit.
 - 6. Factor the line loss and "Amp Draw" to show the actual voltage available at the end of each circuit (after the last device).

1.32 SPARE CAPACITY

- A. Spare capacity shall be incorporated into the Fire Alarm System design to support future expansion or renovations.
- B. The minimum spare capacities shall be provided for the following circuits:
 - 1. 25% for each Signaling Line Circuit (SLC).
 - 2. 25% for each Initiating Device Circuit (IDC).
 - 3. 25% for each Notification Appliance Circuit.
- C. Batteries shall be provided with at least 25% spare capacity.
- D. Conduit and wiremold fill shall not exceed 40% of the interior cross-sectional area.

PART 2 - PRODUCTS

2.1 FIRE ALARM SYSTEM CONTROL PANEL

- A. The Fire Alarm System Control Panel:
 - 1. The Fire Alarm System Control Panel shall be a Silent Knight 6800 series panel.

2.2 FIRE ALARM SYSTEM TERMINAL CABINETS

- A. Fire Alarm System Terminal Cabinets shall be listed to UL #50 "Enclosures for Electrical Equipment, Non-Environmental Considerations", N.F.P.A. #72, and shall be approved for fire protection service.
- B. The terminal cabinet shall be suitable for surface or semi-flush mounting.
- C. The terminal cabinet shall be corrosion protected, given a rust-resistant prime coat, and manufacturer's standard finish.
- D. The door shall be provided with a keyed cylinder lock that is keyed similar to the main Fire Alarm Control Panel enclosure and include a transparent opening for viewing all indicators.
- E. For convenience, the door shall have the ability to be hinged on either the right or left-hand side.
- F. The terminal cabinet shall be modular in structure for ease of installation, maintenance, and future expansion.

2.3 FIRE ALARM REMOTE ANNUNCIATOR PANELS (FARAP)

- A. Provide a Fire Alarm Remote Annunciator Panel in the location(s) indicated within the contract documents.

- B. The Fire Alarm Remote Annunciator Panel(s) shall be programmed to clearly indicate the exact same information that is displayed at the Fire Alarm Control Panel and shall be protected from unauthorized use by a keyed switch (similar to the main Fire Alarm Control Panel enclosure) or password.

2.4 MAIN FIRE ALARM SYSTEM POWER SUPPLIES (FAPS)

- A. The Main Fire Alarm System Control Panel shall provide all power requirements for the Fire Alarm System Control Panel plus additional power for operation of external Notification Appliance Circuits (NACs), remote annunciators, remote paging units, etc.
- B. The Main Fire Alarm System Control Panel Power Supply input power shall be 120 Volts A.C. at 50/60 Hertz.
- C. The Main Fire Alarm System Control Panel Power Supply shall be modular in design allowing additional Remote Power Supplies to be added.

2.5 REMOTE POWER SUPPLIES

- A. Remote Power Supplies shall meet UL #864 "Standard for Control Units and Accessories for Fire Alarm Systems", N.F.P.A. requirements for power-limited operation, and shall be approved for fire protection service.
- B. Provide Remote Power Supplies as required for a fully functional system.
- C. Remote Power Supply input power shall be 120 Volts A.C. at 50/60 Hertz.

2.6 BACK-UP BATTERIES

- A. Provide quantities of Back-Up Batteries that exceed the minimum Back-Up Battery calculation requirements specified in Paragraph 1.35 of Specification Section 283100.
- B. Back-Up batteries for the Fire Alarm Control Panel Power Supply and for each Remote Power Supply shall be a minimum of 12 Volts D.C.
- C. Back-Up Batteries shall be Absorbed Glass Material (AGM) or Gel style sealed batteries.
- D. Back-Up Batteries shall have the following features:
 - 1. Completely Maintenance Free.
 - 2. Deep Cycle.
 - 3. Used in any Position.
 - 4. Low Self-Discharge Rates.
 - 5. Safe for use in Low Ventilated Areas.
 - 6. Can be transported by Ground or Air.
- E. All batteries shall be placed inside a key lockable metal enclosure that is approved by the manufacturer.
- F. Each battery shall have the date of installation written on the battery with a permanent marker and be visible when the enclosure door is open.
- G. The back-up batteries shall be completely sealed, maintenance free, leak proof, and usable in any position.

2.7 INTERNAL BATTERY CHARGERS

- A. The entire Fire Alarm System shall automatically charge Back-Up Batteries by an Internal Battery Charger that operates on a 120 Volts A.C. power source.

- B. The Internal Battery Charger shall either be trickle or float charged and shall be capable of recharging batteries from a fully discharged condition to 100% within a 48-hour time period.
- C. The Internal Battery Charger shall be an integral component of the Fire Alarm System Control Panel.
- D. The charging rate of the Internal Battery Charger shall reduce upon attaining a fully charged condition to avoid damaging of the batteries.
- E. The Internal Battery Charger shall provide either integral meters or readily accessible terminal facilities for the connection of portable meters by which the battery voltage and charging current can be determined.
- F. The Internal Battery Charger shall be provided with a means for monitoring integrity to detect a battery charger failure and to provide a "Trouble" signal at the Fire Alarm System Control Panel.
- G. This Internal Battery Charger will automatically inhibit the deep discharge of the system secondary batteries and shall be protected against the accidental reverse polarity connection of the secondary batteries.

2.8 EXTERNAL BATTERY CHARGERS

- A. External Battery Charger shall automatically charge Back-Up Batteries and shall operate on a 120 Volts A.C. power source.
- B. The External Battery Charger shall either be trickle or float charged and shall be capable of recharging batteries from a fully discharged condition to 100% within a 48-hour time period.
- C. The External Battery Charger shall have the following forms of input:
 - 1. A Notification Appliance Circuit (NAC) from the Fire Alarm System Control Panel.
 - 2. A relay.
- D. The charging rate of the External Battery Charger shall reduce upon attaining a fully charged condition to avoid damaging of the batteries.
- E. The External Battery Charger shall provide either integral meters or readily accessible terminal facilities for the connection of portable meters by which the battery voltage and charging current can be determined.
- F. The External Battery Charger shall be provided with a means for monitoring integrity to detect a battery charger failure and to provide a "Trouble" signal at the Fire Alarm System Control Panel.
- G. This External Battery Charger will automatically inhibit the deep discharge of the system secondary batteries and shall be protected against the accidental reverse polarity connection of the secondary batteries.

2.9 MANUAL PULL STATIONS

- A. Manual Pull Stations shall be double action type with a key operated test/reset lock (keyed similar to the Fire Alarm Control Panel), and designed so that after actuation, the Manual Pull Station cannot be restored to normal operating condition without the use of the key.
- B. Manual pull stations shall be constructed of metal, Lexan, or polycarbonate with clearly visible operating instructions and the word "FIRE" in white lettering provided on the cover.

2.10 HEAT DETECTORS

- A. Heat Detectors shall be 24 Volts D.C., Intelligent, Analog, and Addressable that shall connect to the Fire Alarm System Control Panel's supervised "Class B" Signaling Line Circuit (SLC).

- B. An output connection shall also be provided in the base of the Heat Detector for connections to the following items:
 - 1. Sounder base rated at a minimum of 85 dBA with a low frequency sound.
 - 2. Isolator base.
- C. Provide remote indicating lamps for Heat Detectors that when installed, the Light Emitting Diodes (LEDs) are not visible from the walking surface / floor, such as when installed above a ceiling, at an elevation higher than 15'-0" above finished floor, in an attic, etc.
- D. Provide anti-ligature guards for Heat Detectors installed in areas subject to mechanical damage.

2.11 SMOKE DETECTORS

- A. Smoke Detectors shall be 24 Volts D.C., Intelligent, Analog, and Addressable that shall connect to the Fire Alarm System Control Panel's supervised "Class B" Signaling Line Circuit (SLC).
- B. An output connection shall also be provided in the base of the Smoke Detector for connections to the following items:
 - 1. Sounder base rated at a minimum of 85 dBA.
 - 2. Isolator base.
- C. Upon receiving an alarm signal at the Fire Alarm Control Panel from a system style Smoke Detector (outside of a dwelling unit), all notification appliances shall operate.
- D. Provide remote indicating lamps for Smoke Detectors that when installed. The Light Emitting Diodes (LEDs) are not visible from the walking surface / floor, such as when installed above a ceiling, at an elevation higher than 15'-0" above finished floor, etc.
- E. Provide anti-ligature guards for Strobe Only Appliances installed in areas subject to mechanical damage.

2.12 DUCT SMOKE DETECTORS

- A. Duct Smoke Detectors shall be Intelligent, Analog, Addressable, 24 Volts D.C. type with visual alarm and power indicators, and a reset switch that shall connect to the Fire Alarm System Control Panel's supervised "Class B" Signaling Line Circuit (SLC) loops for monitoring and control.
- B. Provide remote indicating lamps for Dust Smoke Detectors that when installed, the Light Emitting Diodes (LEDs) are not visible from the walking surface / floor or when installed at an elevation higher than 15'-0" above finished floor.

2.13 DUCT SMOKE DETECTOR REMOTE TEST STATIONS

- A. Provide one (1) Duct Smoke Detector Remote Test Station for each duct smoke detector installed that is not visible or readily accessible from the floor.
- B. The use of a single Duct Smoke Detector Remote Test Station to serve multiple duct smoke detectors will not be allowed.
- C. A key switch on the Duct Smoke Detector Remote Test Station shall be used to select the connected duct smoke detector for testing or resetting.

2.14 MULTI-CRITERIA DETECTORS

- A. Multi-Criteria Detectors shall be listed to and be compatible with the Fire Alarm System Control Panel.

- B. Multi-Criteria Detectors shall be 24 Volts D.C., Intelligent, Analog, and Addressable that shall connect to the Fire Alarm System Control Panel's supervised "Class B" Signaling Line Circuit (SLC).
- C. An output connection shall also be provided in the base of the Multi-Criteria Detector for connections to the following items:
 - 1. Sounder base rated at a minimum of 85 dBA with low frequency sound.
 - 2. Isolator base.
- D. Provide remote indicating lamps for multi-Criteria Detectors that when installed. The Light Emitting Diodes (LEDs) are not visible from the walking surface / floor, such as when installed above a ceiling, at an elevation higher than 15'-0" above finished floor, etc.
- E. Provide anti-ligature guards for multi-Criteria Detectors installed in areas subject to mechanical damage.

2.15 STROBE ONLY APPLIANCES

- A. Strobe Only Appliances shall be compatible with the Fire Alarm System Control Panel.
- B. Strobe Only Appliances shall connect to the Fire Alarm System Control Panel's Notification Appliance Circuits (NAC).
- C. Strobe Only Appliances shall have the following characteristics:
 - 1. Shall be 24 Volts D.C.
 - 2. Be installed on the ceiling or on the wall.
 - 3. Shall be white finished.
 - 4. Tamper resistant construction.
 - 5. Shall flash at a rate of one flash per second at 1Hz over the strobes entire operating voltage.
 - 6. Shall have field selectable candela settings.
 - 7. Shall be plug-in type.
 - 8. Shall terminate at a universal mounting plate.
- D. Strobe Only Appliances installed in interior climate-controlled spaces shall have an operating temperature between 32°F and 120°F.
- E. Weatherproof Strobe Only Appliances installed outdoors or in spaces of high humidity shall have the following characteristics:
 - 1. Shall be listed for outdoor use by UL.
 - 2. Shall have an operating temperature between -40°F and 151°F.
 - 3. Shall be provided with an outdoor/weatherproof back box with:
 - a. Conduit entries of 1/2" and 3/4".
 - b. Weatherproof sealant per the manufacturer's recommendations to prevent moisture from entering the structure.

2.16 COMBINATION HORN / STROBE APPLIANCES

- A. Combination Horn / Strobe Appliances shall be compatible with the Fire Alarm System Control Panel.
- B. Combination Horn / Strobe Appliances shall connect to the Fire Alarm System Control Panel's Notification Appliance Circuits (NAC).
- C. The Horn Appliance shall be powered independently of the Strobe Appliance on a coded or non-coded power supply.

- D. Combination Horn / Strobe Appliances shall have the following characteristics:
1. Shall be 24 Volts D.C.
 2. Be installed on the ceiling or on the wall.
 3. Shall be white finished.
 4. Tamper resistant construction.
 5. Shall have three (3) audibility options and an option to switch between a temporal three-pattern and a non-temporal (continuous) pattern.
 6. Shall produce a nominal sound output of 82 dBA at 10'-0".
 7. Shall produce a maximum sound output of 90 dBA at 10'-0".
 8. Shall flash at a rate of one flash per second at 1Hz over the strobes entire operating voltage.
 9. Shall have field selectable candela settings.
 10. Shall be plug-in type.
 11. Shall terminate at a universal mounting plate.
 12. Shall be backward compatible.
- E. The Combination Horn / Strobe Appliance rated decibel output shall be de-rated by 6 decibels each time the distance is doubled as follows:
1. At a distance of 10'-0" from sounder: Rated dB Output.
 2. At a distance of 20'-0" from sounder: Rated dB Output less 6 dB.
 3. At a distance of 40'-0" from sounder: Rated dB Output less 12 dB.
- F. Combination Horn / Strobe Appliances installed in interior climate-controlled spaces shall have an operating temperature between 32°F and 120°F.
- G. Weatherproof Combination Horn / Strobe Appliances installed outdoors or in spaces of high humidity shall have the following characteristics:
1. Shall be listed for outdoor use by UL.
 2. Shall have an operating temperature between -40°F and 151°F.
 3. Shall be provided with an outdoor/weatherproof back box with:
 - a. Conduit entries of ½" and ¾".
 - b. Weatherproof sealant per the manufacturer's recommendations to prevent moisture from entering the structure.

2.17 DAMAGE STOPPERS (WIRE GUARDS)

- A. The Damage Stopper (Wire Guard) shall be UL Listed to U.S. safety standards for use with specific Fire Alarm System devices.
- B. Damage Stoppers (Wire Guards) shall be provided where Fire Alarm System devices (i.e. Strobes, Horns, Smoke Detectors, Heat Detectors, Beam Detectors, Manual Pull Stations, etc.) are subject to vandalism or damage due to flying objects (i.e. Gymnasiums, Multi-Purpose Rooms, Play Areas, etc.)
- C. Provide Cold-Rolled Steel Damage Stoppers (Wire Guards) with a white finished coating to protect Fire Alarm System devices from vandalism or accidental damage in spaces indicated on the contract documents.
- D. The Damage Stopper (Wire Guard) shall be fabricated from 9-gauge cold rolled steel with a white corrosion-resistant polyester coating.
- E. The Detector Damage Stopper (Wire Guard) shall be available for flush mount or with a spacer for surface mounted applications.

- F. Detector Damage Stopper (Wire Guard) shall include four (4) stainless steel tamper resistant #8 X 2" snake eye fasteners for added protection against vandalism or accidental damage.
- G. Detector Damage Stopper (Wire Guard) shall be provided with an easy means of installation and removal of the Damage Stopper (Wire Guard) to facilitate servicing of smoke detector.
- H. Provide Damage Stopper (Wire Guard) with conduit spacers for mounting over surface mounted Fire Alarm System devices, with or without conduit.

2.18 GRAPHIC MAPS

- A. Provide a full color graphical representation of the floor plan(s) that shall be installed directly adjacent to each Fire Alarm Remote Annunciator Panel and by the Fire Alarm System Control Panel.
- B. Graphic maps shall be produced and manufactured by a professional graphic map company. Suggested retailer is H.R. Kirkland or equivalent.
- C. Graphic Maps shall be a minimum of 11"x17" in size, but shall be based upon the actual building footprint with all text being at least a 1/8" scale.
- D. Graphic Maps shall include the following information at a minimum:
 - 1. Building Name(s) (and numbers where applicable). The text shall be **black in color** and ½" Scale.
 - 2. Room Names and Numbers. **Blue Bold ¼" Text**.
 - 3. Doors.
 - 4. Location of the Fire Alarm Remote Annunciator Panel. **Red in Color**.
 - 5. Location of the Fire Alarm System Control Panel. **Red in Color**.
 - 6. End-of-Line resistor locations (Class "B" circuits only).
 - 7. A "You Are Here" with an arrow pointing at the wall or area location of where Graphic Map is to be installed. **Red Text**.
 - 8. Show the system(s) being monitored by the Fire Alarm System.
 - 9. Provide a System Legend at the top of each Graphic Map indicating all initiation device types and the following applicable systems:
 - a. Fire Protection Sprinkler System Water Flow Switch(s)
 - b. Fire Protection Sprinkler System Tamper Switch(s)
 - c. Fire Protection Sprinkler System Pressure Switch(s)
 - d. Other systems that would typically interface to the Fire Alarm System
 - 10. "North" arrow **Black in Color**.
 - 11. Provide the image/logo and name of the Owner at the top of each Graphic Map.
- E. Each Graphic Map shall have all the initiation devices shown in red color at their locations with the device address in green color.
 - 1. Manual Pull Stations
 - 2. Smoke Detectors
 - 3. Heat Detectors
 - 4. Duct Detectors
 - 5. Carbon Monoxide Detectors
 - 6. Control Relays
 - 7. Sprinkler Waterflow Switches

- F. The room numbering system depicted on each Graphic Map shall match that of the final signage and room identification system adopted by the Owner. These shall be larger than the device addresses. This text shall be ¼" and **Blue in Color**.
- G. For Multi-Story Buildings:
 - 1. The bottom of each Graphic Map shall be the lowest level of the building.
 - 2. The top of each Graphic Map shall be the highest level of the building.
- H. Graphic Maps shall be secured in a black anodized aluminum frame. The map shall be non-fading and non-peeling.
- I. Graphic Maps installed on the interior of the building shall consist of the following:
 - 1. Printed on the reverse side of 10 mil polycarbonate Lexan.
 - 2. Standard background shall be white.
 - 3. The Lexan image shall mount to a rigid 1/8" substrate with removable adhesive mounts.
 - 4. The Graphic Map shall be secured to a black anodized aluminum frame.
 - 5. Provide Graphic Map with a concealed security hanging system to prevent unauthorized removal.
- J. Graphic Maps installed on the exterior of the building shall consist of the following:
 - 1. Printed on 1/8" silver brushed aluminum, white aluminum, or stainless steel.
 - 2. The Graphic Map shall be designed to attach to an exterior wall by a screw located in each of the four corners.
 - 3. The Graphic Map shall be non-fading and non-peeling.

2.19 MONITOR MODULES

- A. Monitor Modules shall be listed to and be compatible with the Fire Alarm System Control Panel.
- B. Provide an addressable Monitor Module to supervise a circuit of dry contact input devices.
- C. Monitor Modules shall have built-in type identification that automatically identifies the devices as a Monitor Module to the Fire Alarm System Control Panel.
- D. Monitor Modules shall monitor Alarm, Trouble, and Supervisory outputs for the following Specialty Systems:
 - 1. Pre-Action System
 - 2. Deluge System
 - 3. Clean Agent Suppression System
 - 4. Hood Suppression System
 - 5. Other systems that would typically interface to the Fire Alarm System.

2.20 RELAY MODULES

- A. Relay Modules shall be listed to and be compatible with the Fire Alarm System Control Panel.
- B. The Relay Module shall provide two (2) isolated sets of "Form C" contacts, which operate as a Double Pole Double Throw (DPDT) switch rated at up to:
 - 1. 1 Amp at 30 Volts D.C. of inductive load.
 - 2. 2 Amps at 30 Volts D.C. (coded) of resistive load.
 - 3. 3 Amps at 30 Volts D.C. for non-coded applications.
- C. The Relay Module shall not provide supervision of the Notification Appliance Circuit (NAC).

- D. Relay Modules shall have both normally open and normally closed connections available for field cabling.
- E. Addressable Relay Modules shall be provided for the following:
 - 1. Duct Smoke Detectors
 - 2. HVAC Systems
 - 3. Magnetic Door Holders
 - 4. Magnetic Door Releases
 - 5. Other building functions.

2.21 MULTI-VOLTAGE RELAY MODULES (RELAY IN BOX)

- A. Multi-Voltage Relay Modules shall be listed to UL #864 "Standard for Control Units and Accessories for Fire Alarm Systems" and shall be approved for fire protection service.
- B. Multi-Voltage Relay Modules shall allow a compatible Fire Alarm System Control Panel to switch discrete contacts by coded command.
- C. Multi-Voltage Relay Modules shall be used for high-current switching applications such as fan and damper assembly control, door control, air handling unit controls, and other types of system interfacing.
- D. Multi-Voltage Relay Modules shall have one (1) "Form C" contact which operate as a Single Pole Double Throw (SPDT) relay with a red activation Light Emitting Diode (LED).
- E. Multi-Voltage Relay Modules shall be mounted into a steel enclosure that has a removable front cover to provide easy access with a Light Emitting Diode (LED) viewing hole.
- F. The Multi-Voltage Relay Module shall allow the Fire Alarm System Control Panel to switch the "Form C" contact upon command.
- G. The Multi-Voltage Relay Module shall not provide supervision of the Notification Appliance Circuit (NAC).
- H. Multi-Voltage Relay Modules shall have both normally open and normally closed connections available for field cabling.
- I. Multi-Voltage Relay Modules shall be capable of operating on a 24 Volts D.C., 120 Volts A.C., or 240 Volts A.C. power source.
- J. Multi-Voltage Relay Modules shall have a Light Emitting Diode (LED) that is controlled by the Fire Alarm System Control Panel to indicate module status.
- K. Coded signals, transmitted from the Fire Alarm System Control Panel, can cause the Light Emitting Diode (LED) to blink, latch on, or latch off.

2.22 CONTROL MODULES

- A. Control Modules shall be listed to and be compatible with the Fire Alarm System Control Panel.
- B. Power for the Control Module shall be provided by the 24 Volts D.C. Signaling Line Circuit (SLC) loop to reduce cabling connection requirements.
- C. Control Modules shall be capable of Class "A B" operation.
- D. Addressable Control Modules shall be activated through Fire Alarm System Control Panel programming on a select basis (zone or area of coverage).
- E. Upon programming command from the Fire Alarm System Control Panel, the Control Module shall disconnect the supervision and connect the external power supply in the proper polarity across the load device.

- F. The disconnection of the supervision shall provide a positive indication to the Fire Alarm System Control Panel that the Control Nodule has turned "On".

2.23 ISOLATION MODULES

- A. Isolation Modules shall be listed to and be compatible with the Fire Alarm System Control Panel.
- B. Isolation Modules shall be provided to automatically isolate wire-to-wire short circuits on Signaling Line Circuit (SLC) loops.
- C. A maximum of 20 devices shall be provided between Isolation Modules on the Signaling Line Circuit (SLC) loop and limits the number of modules or detectors that may be rendered inoperative by a short circuit fault on the Signaling Line Circuit (SLC) Loop.
- D. If a wire-to-wire short occurs, the Isolation Module shall automatically open-circuit (disconnect) the Signaling Line Circuit (SLC) loop and prevent the short from causing failure of the entire Signaling Line Circuit (SLC) loop.

2.24 REMOTE INDICATING LAMPS

- A. The Remote Indicating Lamp shall provide status indication by a single RED Light Emitting Diode (LED),
- B. The RED Light Emitting Diode (LED) shall be mounted on a single gang plate.
- C. Provide label on plate indicting device designation in concealed space above.

2.25 MAGNETIC DOOR HOLDERS

- A. Magnetic Door Holders shall be listed to UL #228 "Standard for Door Closers-Holders, with or without Integral Smoke Detectors" and shall be approved for fire protection service.
- B. Magnetic Door Holders shall consist of both an electromagnet and an armature assembly.
- C. Magnetic Door Holders shall be rated for continuous duty and operate using a 120 Volts A.C. power source.
- D. Activation of the Fire Alarm System shall automatically release the Magnetic Door Holders allowing the fire rated doors to close and shall remain in the release mode until the Fire Alarm System Control Panel is reset.

2.26 MAGNETIC DOOR LOCKS

- A. Magnetic Door Locks shall be listed to UL #228 "Standard for Door Closers-Holders, with or without Integral Smoke Detectors" and shall be approved for fire protection service.
- B. Magnetic Door Locks shall consist of both an electromagnet and an armature assembly.
- C. Magnetic Door Locks shall be rated for continuous duty and operate using a 120 Volts A.C. power source.
- D. Activation of the Fire Alarm System shall automatically release the Magnetic Door Locks unlocking the doors and shall remain in the release mode until the Fire Alarm System Control Panel is reset.

2.27 SYSTEMS PLYWOOD BACKBOARD(S)

- A. Plywood Backboard shall be used to mount all Fire Alarm System enclosures to any wall or surface, even if wall is concrete or CMU.
- B. Mounting of equipment shall be logically placed, and shall be located to accommodate future growth of the Fire Alarm System.

- C. The Systems Plywood Backboard shall be securely fastened to the wall to accommodate no less than ten times the total weight of the equipment to be mounted or 150 pounds, whichever is greater.
- D. The Systems Plywood Backboard shall be a minimum of 3/4", APA exterior grade Douglas Fir A-C that is fire retardant having a flame spread rating not more than 25 when tested in accordance with ASTM E-84.
- E. Provide Systems Plywood Backboard from 1'-0" above finished floor up to the ceiling height or 10'-0", whichever is lower.
- F. The entire backboard shall be painted with three (3) coats of fire-retardant paint (the color shall match the adjacent surface).

2.28 UNIVERSAL DIGITAL ALARM COMMUNICATOR TRANSMITTER (UDACT)

- A. The Universal Digital Alarm Communicator Transmitter (UDACT) shall be listed to and be compatible with the Fire Alarm System Control Panel.
- B. The Universal Digital Alarm Communicator Transmitter (UDACT) is an interface for communicating digital information between a Fire Alarm System Control Panel and central station monitoring company.
- C. Cabling connections between the Universal Digital Communicator Transmitter (UDACT) and the Fire Alarm System Control Panel shall be supervised with one pair of cabling for power and one pair of cabling for multiplexed communication of overall system status.
- D. The Universal Digital Communicator Transmitter (UDACT) shall communicate the following vital system information:
 - 1. Independent zone (alarm, trouble and supervisory).
 - 2. Independent addressable device status.
 - 3. AC power loss.
 - 4. Low battery (DC power).
 - 5. Earth fault.
 - 6. System off normal.
 - 7. 12 and 24-hour test signal.
 - 8. Abnormal test signal (per UL requirements).
 - 9. EIA-485 communication failure.
 - 10. Phone line failure.
- E. An IP Communicator option shall be available to interface to the Universal Digital Communicator Transmitter (UDACT) and be capable of transmitting signals over the internet/intranet to a compatible receiver.

2.29 AES WIRELESS TRANSCEIVER

- A. AES Wireless Transceiver shall be listed to UL #365 "Standard for Police Station Connected Burglar Alarm Units and Systems", UL #864 "Commercial Fire Alarm Requirements for Primary Standalone Communication", UL #1681 "Standard for Wiring Device Configurations" and meet N.F.P.A. #72 requirements.
- B. The AES Wireless Transceiver (AES 7788F-UPL) shall provide a wireless communication link between the Fire Alarm System Control Panel and the central station monitoring company receiver via telephone lines connected to the Universal Digital Communicator Transmitter (UDACT).

- C. The AES Wireless Transceiver shall be capable of supporting Alarm, Supervisory, and Trouble signals from the Fire Alarm System Control Panel and shall be able to monitor telephone lines, antenna cuts, battery status, and AC power status.
- D. The standard frequency range of the AES Wireless Transceiver shall be 450-470 MHz and shall be narrow band compliant.
- E. The AES Wireless Transceiver shall be provided within a full-sized rugged metal enclosure.
- F. The Fire Alarm System Contractor shall confirm radio signal strength and provide appropriate antenna.
- G. Exterior antenna installations shall require all exterior building penetrations to be sealed.

2.30 ANTENNAS

- A. Antennas shall be omnidirectional coaxial halfwave dipole type for radio transmitters with a driving point impedance to match transmitter output.
- B. VHF Antennas provide transmission and reception of the VHF RF signals between the radio Transmitter and the Radio Frequency Modem that is connected to the Radio Central Receiving System.
- C. The antenna and antenna mounts shall be corrosion resistant and designed to withstand wind velocities up to 100 m.p.h.
- D. Do not mount antennas to any portion of the building roofing system.
- E. Protect the antenna from physical damage.
- F. The Antenna shall be provided with a Lightning Arrestor to drain static charges from the antenna system.
- G. The Lightning Arrestor shall allow direct earth ground connection in accordance with N.F.P.A. #70 Section 810-21 while preventing are energy from being coupled to the equipment through the coaxial shields.
- H. The use of enlarged coaxial cabling shall require Voltage Drop Calculations.

2.31 TRANSIENT VOLTAGE SURGE PROTECTION

- A. If not provided as an integral part of the Fire Alarm System power supply, an external means of Transient Voltage Surge Protection shall be provided for all components of the system.
- B. The means of Transient Voltage Surge Protection shall be listed to UL #497A "Standard for Secondary Protectors for Communications Circuits", UL #1283 "Standard for Electromagnetic Interference Filters", UL #1449 "Standard for Surge Protective Devices", and shall be approved for fire protection service.
- C. All circuits shall be provided with transient suppression devices and the system shall be designed to permit simultaneous operation of all circuits without interference or loss of signals.
- D. Transient Voltage Surge Protection shall have a minimum energy handling of 70 Joules on line to line, line to neutral, and line to ground spikes.
- E. The response time for Transient Voltage Surge Protection shall be 5 nanoseconds or less and shall begin at 140 Volts A.C.
- F. Provide one (1) dedicated Transient Voltage Surge Suppressor (TVSS) for each 120 Volts A.C. hard wired connection point.

2.32 FIRE PROTECTION SYSTEM CONNECTIONS

- A. Fire Sprinkler System Connections shall be listed to UL #346 "Standard for Waterflow Indicators for Fire Protective Signaling Systems", UL #864 "Standard for Control Units and Accessories for Fire Alarm Systems" and shall be approved for fire protection service.
- B. Fire Protection Sprinkler System devices shall be connected to the Fire Alarm System Control Panel so that the movement of a valve and/or switch shall notify the Fire Alarm System.
- C. The Fire Protection Sprinkler Contractor shall provide and install all fire protection sprinkler system switches and/or equipment that include, but are not limited to following:
 - 1. Tamper Switch(s).
 - 2. Water Flow Switch(s).
 - 3. Pressure Switch(s)
 - 4. Other systems that would typically interface to the Fire Alarm System.
- D. The Fire Alarm System Contractor / Electrical Contractor shall provide and install the conduit, junction boxes, couplers, connectors, cabling, terminations, and the necessary Fire Alarm System equipment to monitor and/or power the fire sprinkler system switches and equipment.
- E. Each fire protection sprinkler system tamper switch shall be provided with a Monitor Module by the Fire Alarm System Contractor.
- F. Fire protection sprinkler system tamper switches on the valve controlling the backflow preventer full forward flow test piping shall be connected to the Fire Alarm System Control Panel such that the movement of a valve from the normally closed position shall initiate a supervisory signal.
- G. Fire protection sprinkler system tamper switches on all other valves except for the valve controlling the backflow preventer full forward flow test piping shall be connected to the Fire Alarm System Control Panel such that the movement of a valve from the normally open position shall initiate a supervisory signal.
- H. The Fire Alarm System Contractor shall coordinate locations and quantities of Fire Protection Sprinkler System devices with the Fire Protection Sprinkler System Contractor.
- I. Fire Protection Sprinkler System Electric Alarm Bell
 - 1. The Fire Alarm System Contractor shall provide an electric alarm bell.
 - 2. The Fire Protection system electric alarm bell shall operate on a 24 Volts D.C. power supply that shall be powered by the Fire Alarm System Control Panel allowing the electric bell to be on a back-up power supply.
 - 3. The Fire Alarm System Contractor / Electrical Contractor shall connect the sprinkler system electric alarm bell to the Fire Alarm system Control Panel.
 - 4. Coordinate installation location of the electric alarm bell with the Fire Protection Sprinkler System Contractor.
 - 5. The sprinkler system electric alarm bell shall activate upon the flow of water past the water flow switch or pressure switch only.
 - 6. The sprinkler system electric alarm bell shall be silenced upon the flow of water past the water flow switch or pressure switch terminating and water flow switch or pressure switch returning to a "Normal" condition.

2.33 FAN / DAMPER CONTROL CIRCUITS

- A. Fan shutdown control circuits and smoke removal circuits shall be electrically supervised per N.F.P.A. #72 requirements.
- B. Provide a single "Form C" isolated contact output and cabling from the Fire Alarm System to the Energy Management Control System (EMCS).

- C. Provide a second isolated contact for automatic closure of smoke dampers and combination smoke / fire dampers.
- D. Upon activation of a general "Alarm" condition in the area in which the smoke damper or combination fire / smoke damper is located, the smoke damper or combination fire / smoke damper shall automatically close and the mechanical equipment shall be disabled.
- E. Provide all necessary connections, programming and testing for the shutdown of affected mechanical equipment.
- F. Power supply for damper actuators shall be provided by the Electrical Contractor.
- G. Fusible link style dampers shall not be connected to the Fire Alarm System.

2.34 WIREMOLD SURFACE RACEWAY

- A. Wiremold Surface Raceway shall meet the requirements of Underwriters Laboratories Inc. and conform to U.S. Federal Specification W-C-582.
- B. Wiremold Surface Raceway shall be in accordance with N.F.P.A. #70, local requirements, and state requirements.
- C. Wiremold Surface Raceway shall be constructed of steel with a minimum thickness of 0.040".
- D. Wiremold Surface Raceway shall have the following features:
 - 1. Rugged steel raceway.
 - 2. Low-profile and unobtrusive appearance.
 - 3. Base and cover are preassembled as a one-piece unit.
 - 4. Surface mounting.
 - 5. Full line of fittings.
 - 6. Fittings have removable covers.
 - 7. UL #5 "Standard for Surface Metal Raceways and Fittings" and ADA compliant.

2.35 WET RATED CABLES

- A. Wet Rated Cables shall have a flame rating that meet UL #1685 "Standard for Vertical-Tray Fire-Propagation and Smoke-Release Test for Electrical and Optical-Fiber Cables" requirements.
- B. Wet Rated Cables shall be Type FPL, PLTC, or CL3 cables that meet the 300 Volt requirements as specified in N.F.P.A. #70.
- C. Wet Rated Cables shall be rated for "Direct Burial" or "Underground in Conduit" installations.
 - 1. "Direct Burial" rated cables shall consist of the following:
 - a. ASTM Bare Copper.
 - b. PVC Insulation with Nylon.
 - c. Twisted Pair or Cabled Construction.
 - d. Overall Shield 100% Coverage of Aluminum Polyester Foil with Drain Wire.
 - e. Water Blocked Construction.
 - f. Overall Sunlight / Moisture Resistant PVC Jacket.
 - 2. "Underground in Conduit" rated cables shall consist of the following:
 - a. ASTM Bare Copper.
 - b. PVC Insulation.
 - c. Short Twisted Construction.
 - d. Unshielded.
 - e. Water Blocked Construction.
 - f. Overall Sunlight / Moisture Resistant PVC Jacket.

2.36 FIRE ALARM SYSTEM CIRCUITS

- A. Notification Appliance Circuit (NAC) circuits shall be arranged such that there is a minimum of one horn circuit per floor of the building or smoke zone whichever is greater, but not more than 25 devices per circuit.
- B. Notification Appliance Circuit (NAC) circuits and control equipment shall be arranged such that loss of any one (1) Horn circuit will not cause the loss of any other horn circuit in the system.
- C. Elevator Interface to the Fire Alarm System:
 - 1. Activation of a smoke detector located in any Elevator Lobby or Elevator Machine Room shall initiate the "Elevator Recall" feature.
 - a. All elevator cabs shall return to the "Primary" floor of egress when the smoke detector activated is not located on the "Primary" floor of egress.
 - b. All elevator cabs shall return to the "Alternate" floor of egress when the active smoke detector is located on the "Primary" floor of egress.
 - 2. Activation of a heat detector located in the bottom of Hoistway shall initiate the "Elevator Recall" feature.
 - a. All elevator cabs shall return to the "Alternate" floor of egress when the active Heat detector is activated.
 - 3. The heat detector installed in the Elevator Machine Room shall be a mechanical style, 135°F fixed temperature activation having dual contacts that are in the normally open position for the following features:
 - a. One set of contacts shall be used to monitor integrity of the circuit by the Fire Alarm System Control Panel.
 - b. One set of contacts shall be used to initiate the "Shunt Trip Breaker" feature in which power to the elevator is terminated and the Elevator instantaneously shut down in accordance with ANSI A17.1 requirement.
 - 4. Installation of the heat detector serving the bottom of Hoistway or Elevator Machine Room shall be coordinated with the Elevator Contractor, and Fire Protection Sprinkler System Contractor.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Installation, workmanship, fabrication, assembly, erection, examination, inspection, and testing shall be in accordance with N.F.P.A. #72 except as modified herein.
- B. The work performed under this specification shall be of good quality and performed in a workmanlike manner. In this context "Good Quality" means the work shall meet industry technical standards and quality of appearance. The Owner reserves the right to reject all or a portion of the work performed, either on technical or aesthetic grounds.
- C. The authorized representative of the manufacturer of the major equipment, such as control panels, shall be responsible for the satisfactory installation of the complete system.
- D. All equipment shall be attached to walls and ceiling/floor assemblies and shall be held firmly in place (e.g., detectors shall not be supported solely by suspended ceilings).

- E. All equipment and components shall be installed in strict compliance with each manufacturer's recommendations. Consult the manufacturer's installation manuals for all cabling diagrams, schematics, physical equipment sizes, etc. before beginning system installation and refer to the riser / connection diagram for all specific system installation / termination / cabling data.
- F. Fasteners and supports shall be adequate to support the required load.

3.2 FLEXIBILITY IN SYSTEM DESIGN

- A. The Fire Alarm System contractor shall provide flexibility in their design to accommodate future expansion or tenant improvements.
- B. Provide all quantities of equipment as specified, while maintaining the "Spare Capacity" requirements listed in this Specification.

3.3 FIRE ALARM SYSTEM MOUNTING HEIGHTS AND LOCATIONS

- A. Fire Alarm System Control Panel (FACP):
 - 1. The Fire Alarm System Control Panel shall be installed in the main electrical room. This is accessed by going through the sprinkler riser room.
 - 2. The Fire Alarm System Control Panel shall be flush mounted when located in finished areas and may be surface mounted when located in unfinished areas.
 - 3. The top of the Fire Alarm System Control Panel shall be located 60" above the finished floor, unless noted otherwise and shall be installed level.
- B. Fire Alarm System Terminal Cabinets:
 - 1. Where Fire Alarm System Terminal Cabinets are required, they shall be installed within spaces designated for electrical equipment (Electrical Rooms, MDF Rooms, IDF Rooms, etc.).
 - 2. Fire Alarm System Terminal Cabinets shall be flush mounted when located in finished areas and may be surface mounted when located in unfinished areas.
 - 3. The top of the Fire Alarm System Terminal Cabinet shall be located 60" above the finished floor, unless noted otherwise and shall be installed level.
- C. Fire Alarm Remote Annunciator Panel(s) (FARAP):
 - 1. The Fire Alarm Remote Annunciator Panel(s) shall be installed in the location indicated on the contract documents.
 - 2. The Fire Alarm Remote Annunciator Panel(s) shall be flush mounted when located in finished areas and may be surface mounted when located in unfinished areas.
 - 3. The top of the Fire Alarm Remote Annunciator Panel(s) (FARAP) shall be located 54" above the finished floor, unless noted otherwise and shall be installed level.
- D. Multi-Criteria Detectors:
 - 1. Multi-Criteria Detectors in Dwelling Units shall be installed in the following locations:
 - a. On every level of a dwelling unit.
 - b. Inside every sleeping area of a dwelling unit.
 - c. In the hall outside of every sleeping area of a dwelling unit.
 - d. At the top and bottom of a stairway.
 - e. In any room that contains a fuel-burning appliance.
 - 2. Listed Multi-Criteria Detector spacing shall be de-rated in accordance with Table 17.6.3.5.1 of N.F.P.A. #72 for spaces having a ceiling height of 10'-0" up to 30'-0" in height.
 - 3. Multi-Criteria Detectors in Dwelling Units shall not be installed in the following locations:
 - a. Within 1'-0" of fluorescent light fixtures.

- b. Within 20'-0" of sources of combustion particles (Stoves, Furnaces, Water heaters, Space Heaters, etc.).
 - c. Within 10'-0" of Damp, Humid, or Steamy Areas (Showers, Saunas, Dishwashers, etc.).
 - d. Within 3'-0" from a door to a bathroom containing a shower or tub.
 - e. Within 3'-0" from a supply or exhaust HVAC grille.
 - f. Within 3'-0" from the tip of the blade of a ceiling suspended fan.
 - g. Within 4" of a ceiling/wall corner.
 - h. No further than 3'-0" from the peak of the ceiling measured horizontally.
 - i. On the wall lower than 1'-0" down from the ceiling.
 - j. In poorly ventilated Kitchens, Garages, and Furnace Rooms.
 - k. In air streams near Kitchens.
 - l. In areas where temperatures are regularly below 40°F or above 100°F (Unheated Buildings, Outdoor Rooms, Porches, Unfinished Attics, Basements, etc.).
 - m. In very Dusty, Dirty, or Greasy Areas (Directly over Stoves or Ranges, Laundry Rooms, etc.).
 - n. In insect infested areas.
 - o. Near fresh air vents, ceiling fans, or in very drafty areas.
- E. Strobe Only Appliances:
- 1. Strobe Only Appliances shall be flush mounted when located in finished areas.
 - 2. Strobe Only Appliances may be surface mounted when located in unfinished areas.
- F. Combination Horn / Strobe Appliances:
- 1. Combination Horn / Strobe Appliances shall be flush mounted when located in finished areas.
 - 2. Combination Horn / Strobe Appliances may be surface mounted when located in unfinished areas.

3.4 DEVICE RELOCATIONS

- A. Prior to installation and without extra charge, the Owner may:
- 1. Relocate devices up to 15'-0" from location indicated.
 - 2. Change from a ceiling mounted to a wall mounted installation.
 - 3. Change from a wall mounted to a ceiling mounted installation.

3.5 CONDUIT

- A. Provide and install conduit, junction boxes, couplers, connectors, cabling, terminations, and the necessary Fire Alarm System equipment to monitor and/or power any specialty system control panel(s) and equipment.
- B. The Contractor is responsible for assuring that the conduit size is suitable for the equipment supplied.
- C. All conduit, junction boxes, conduit supports, and hangers shall be concealed in finished areas and may be exposed in unfinished areas.
- D. Cabling installed in walls, below 8'-0" in elevation, above inaccessible ceilings or installed exposed to view shall be installed in conduit.
- E. Conduit shall be in accordance with N.F.P.A. #70, local requirements, and state requirements.
- F. The minimum radius bend of conduit shall be:
 - 1. Ten (10) times the cable outside diameter with no tensile load applied during installation.
 - 2. Twenty (20) times the cable outside diameter with a maximum tensile load of 25 feet/lbs. applied during installation.

- G. Conduit shall not enter the Fire Alarm System Control Panel or any other remotely mounted panel, equipment, or back box, except where conduit entry is specified by the manufacturer.

3.6 WIREMOLD SURFACE RACEWAY

- A. Provide and install the Wiremold Surface Raceway, junction boxes, couplers, connectors, cabling, terminations, and the necessary Fire Alarm System equipment to monitor and/or power any specialty system control panel(s) and equipment.
- B. The Contractor is responsible for assuring that the Wiremold Surface Raceway size is suitable for the equipment supplied.
- C. All Wiremold Surface Raceway, junction boxes, conduit supports, and hangers shall be exposed.
- D. Wiremold Surface Raceway shall not enter the Fire Alarm System Control Panel or any other remotely mounted panel, equipment, or back box, except where Wiremold entry is specified by the manufacturer.

3.7 CABLING

- A. Cabling for 24 Volts D.C. control, alarm notification, emergency communications, and similar power-limited auxiliary functions may be run in the same conduit as Initiating Device Circuits (IDC) and Signaling Line Circuits (SLC).
- B. The Contractor is responsible for assuring that the cable quantity, size, and type is suitable for the equipment supplied.
- C. Cable must be separated from any open conductors of Power or Class 1 circuits and shall not be placed in any conduit, junction box, or raceway containing these conductors per Article 760 of N.F.P.A. #70.
- D. Do not exceed the cabling distance limitation of the equipment, device(s), cable(s), and/or conductor(s) as recommended by the manufacturer of either equipment and/or cables for each installation application.
- E. All Fire Alarm System cabling must be new and free from insulation scrapes or peeling.
- F. Cabling insulation shall be one of the types required by Article 725-16 of N.F.P.A. #70 and shall be consistently color coded throughout the system.
- G. The Fire Alarm System Control Panel shall be connected to a separate dedicated branch circuit rated for a maximum of 20 amperes at 120 Volts A.C. This circuit shall be labeled at the main power distribution panel as "FIRE ALARM".
- H. Permanent cable markers shall be affixed to all conductors at terminations and splices.
- I. T-Tapping of Class "A" circuits (i.e. Initiating Device Circuits (IDC), Notification Appliance Circuits (NAC), Signaling Line Circuits (SLC) etc.) is not allowed.
- J. T-Tapping of Class "B" circuits (i.e. Initiating Device Circuits (IDC) and Notification Appliance Circuits (NAC) is not allowed.
- K. T-Tapping of Class "B" circuits (i.e. Signaling Line Circuits (SLC) etc.) is allowed.
- L. All cabling terminal blocks shall be the plug-in / removable type and shall be capable of terminating up to 12 AWG cable.
- M. Exposed cabling will be allowed above accessible ceilings only.

1. Class "A" exposed cabling installed vertically in concealed locations shall be provided with a minimum separation distance of 1'-0".
 2. Class "A" exposed cabling installed horizontally in concealed locations shall be provided with a minimum separation distance of 4'-0".
- N. Cable not installed in conduit shall have a fire resistance rating suitable for the installation as indicated in N.F.P.A. #70 (e.g., FPLR).
- O. The Fire Alarm System Contractor shall insure that cables are installed with care, using techniques which prevent kinking, sharp bends, scraping, cutting, deforming the jacket, or other damage. During inspection, evidence of such damage will result in the material being declared unacceptable. The Fire Alarm System Contractor shall replace all unacceptable cabling at no additional expense to the Owner.
- P. For consistency of cabling throughout the entire system equipment, if specific conductor colors are not called out in each system specification, then the following colors shall apply:
1. Red is (+) Positive voltage.
 2. Black is (-) Negative voltage.
 3. White is common.
 4. Green is normally open or normally closed.
- Q. All cabling penetrations into a box, fitting, enclosure, panel, etc. shall be provided with a bushing to protect the cabling from abrasion in accordance with Paragraph 342.46 of N.F.P.A. #70. Hard rubber or compression bushings will not be approved and shall not be used.
- R. In the event of a primary power failure, disconnected back-up battery, an open circuit in the field cabling, or removal of any internal modules a trouble signal shall be activated and remain active until the system is restored to normal condition.
- S. Initiating circuits shall be arranged to serve like categories (manual, smoke, water flow).
- T. No cable other than the detector circuit shall be permitted in conduit feeding detectors unless approved.
- U. Mixed category circuitry shall not be permitted except on signaling line circuits connected to intelligent reporting devices.
- V. Minimum cable sizes shall be as follows:
1. 120 Volts A.C. cabling shall be a minimum of #12 American Wire Gauge (AWG).
 2. Initiating Device Circuits (IDC) (Manual Pull Stations, Heat Detectors, Smoke Detectors, Carbon Monoxide Detectors, Duct Smoke Detectors, etc.) shall be a minimum of #16 American Wire Gauge (AWG) twisted shielded pair FPL rated.
 3. Notification Appliance Circuits (NAC) (Horns, and Strobes) shall be a minimum of #16 American Wire Gauge (AWG) shielded, twisted FPL rated cable.
 4. Signaling Line Circuit (SLC) (Manual Pull Stations, Heat Detectors, Smoke Detectors, Carbon Monoxide Detectors, Duct Smoke Detectors, etc.) shall be a minimum of #16 American Wire Gauge (AWG) twisted FPL rated cable.
 5. Heat detectors shall be a minimum of #16 American Wire Gauge (AWG).
 6. Linear Heat Detector Cables shall be served by a minimum of #18 American Wire Gauge (AWG) from the Fire Alarm System Control Panel out to the hazard area where it is then connected to the beginning of the Linear Heat Detector Cable portion of the circuit.
 7. Monitor modules shall be a minimum of #18 American Wire Gauge (AWG).
 8. "Direct Burial" cables shall be a minimum of #16 American Wire Gauge (AWG).

9. "Underground in Conduit" cables shall be a minimum of #16 American Wire Gauge (AWG).
- W. Provide a Fire Alarm System Device Naming Matrix that identifies the nomenclature used on the shop drawing consisting of the following:
 1. Circuit Type
 2. Circuit Number
 3. Device type
 4. Device number
- X. Circuit labels shall be provided using an electronic labeler for the following circuit locations:
 1. At the Fire Alarm System Control Panel.
 2. At all junction boxes.
 3. At all addressable devices – Label with device address and loop number.

3.8 CABLE SUPPORTS

- A. All horizontal cables shall be independently supported from other trade work at a maximum of 4'-0" intervals. At no point shall cables rest on, be tied to, or otherwise secured to electrical conduit, plumbing piping, H.V.A.C. ductwork, Fire Protection Piping, accessible ceiling and/or light fixture hangers, or any other equipment.
- B. Cable shall be secured to building structure by means of approved low voltage cabling supports.
- C. Cabling in any Panel shall be neatly arranged and bundled with cabling ties or approved equivalent, zip ties shall not be utilized.
- D. All open cabling and/or conduit shall be installed parallel or perpendicular to the structure.
- E. Open cable installations shall use insulated mounting supports, "D rings", or "J-Hooks" above accessible ceilings where approved for such use.
- F. Cabling shall be installed near or on structural members as to minimize risk of physical damage by other trades or maintenance personnel servicing the equipment.
- G. Installing open cabling and/or conduit on an exposed area of wall that could have been installed in a less conspicuous manner is not acceptable. Any installation that does not meet this requirement will be required to be removed and the ceiling/wall patched and painted to match adjacent surfaces to the satisfaction of the Owner at no additional cost to the Owner.
- H. Hangers provided under other Divisions shall not be used for support of Fire Alarm System equipment unless permitted by Owner.

3.9 JUNCTION BOXES

- A. Provide access panels as needed for junction boxes located above inaccessible ceilings or behind walls.
- B. All junction boxes for the Fire Alarm System shall be painted red.
- C. All Fire Alarm System junction boxes shall be annotated "FA" on the cover in black bold print having minimum character font size of 2" tall by 1" wide.
- D. All Fire Alarm System junction boxes shall be painted red (inside and out) and annotated "FIRE ALARM POWER LIMITED" on the cover in black bold print having a minimum character font size of ¼" tall by ¼" wide per WAC 296-46B 760.

3.10 GROUNDING

- A. A grounding system shall be maintained as required by code.

3.11 FORMAL TESTS AND INSPECTIONS

- A. Do not submit a request for formal test and inspection until the preliminary test (including audibility and intelligibility testing results) are completed and corrections are made and approved.
- B. The Fire Alarm System Contractor shall arrange for and obtain all required inspections and certificates pertaining to the Fire Alarm System work and deliver the certificates to the Fire Protection Engineer.
- C. Submit copies of preliminary test results to the Owner for review and approval prior to submitting a request for final acceptance testing with the Authority Having Jurisdiction.
- D. Submit a written request to local fire protection authority for formal inspection at least 14 days before the inspection date.
- E. An experienced technician regularly employed by the system installer shall be present during the inspection.
- F. At this inspection, repeat any or all of the required tests as directed.
- G. Correct defects in work provided by the Contractor and perform additional system tests until the system complies with current code and the contract requirements.
- H. Furnish appliances, equipment, electricity, instruments, connecting devices and personnel for the tests.
- I. Furnish Owner with three (3) copies of test certificates required by testing agencies.

3.12 FIRE ALARM SYSTEM TESTING

- A. Upon completion on the system installation, the Fire Alarm System Contractor shall conduct a system test for the Owner, Architect, Engineer, and Authority Having Jurisdiction (for those who wish to attend) to verify operation of the system.
- B. This system test shall be conducted by a factory trained technician.
- C. The Fire Alarm System Contractor shall provide a minimum of (2), two-way communication devices for the system test.
- D. The Fire Alarm System Contractor shall completely fill out all applicable documents contained Section 7.8 "Forms" of N.F.P.A. #72.
- E. If the Fire Alarm System Contractor fails the Authority Having Jurisdiction system test and inspection, the following shall occur:
 - 1. The Fire Alarm System Contractor shall make all of the necessary corrections as required, to pass the Authority Having Jurisdiction testing and inspection.
 - 2. Notify the Authority Having Jurisdiction and schedule another test.
 - 3. Pay all associated fees for additional site visits made by the Authority Having Jurisdiction.
 - 4. Continue making corrections until the Fire Alarm System has been accepted by the Authority Having Jurisdiction.
- F. After acceptance of the system testing, the Fire Alarm System Contractor shall submit a copy of approved test certificates with Authority Having Jurisdiction signature

3.13 AUDIBILITY REQUIREMENTS

- A. The Fire Alarm System Contractor shall perform audibility testing in each space of the building prior to acceptance testing.

- B. Decibel readings shall be taken at a point 10'-0" from the appliance at an elevation of 5'-0" above finished floor.
- C. The sound level shall meet both of the following requirements:
 - 1. A minimum of 15 decibels (dBs) above the average ambient sound level.
 - 2. A minimum of 5 decibels (dBs) above the maximum sound level having a minimum duration of 60 seconds.
- D. Decibel measurements shall be taken using the "A-weighted" measurements which are relatively flat from 600 Hz to 7,000 Hz, "B-weighted" (relatively flat from 300 Hz to 4,000 Hz) and "C-weighted" (relatively flat from 700 Hz to 4,000 Hz, measurements will not be acceptable).

3.14 INSTRUCTION AND TRAINING PERIOD

- A. Upon completion of the work and after all tests and inspections by the authority(s) having jurisdiction, the Fire Alarm System Contractor shall "Hands On" demonstrate and train the Owner's designated operation and maintenance personnel in the operation and maintenance of the Fire Alarm System.
- B. The Fire Alarm System Contractor's representative shall be a superintendent, foreman, or technician who is knowledgeable in the system installed.
- C. The Fire Alarm System Contractor shall arrange scheduled instruction periods with the Owner's designated operation and maintenance personnel.
- D. The Fire Alarm System Contractor shall provide in their bid the following:
 - 1. One (1) editing session of the control panel programming to address any changes required by the Owner.
 - 2. Training periods shall be based upon complexity of the system installed, but in no case be less than 4 hours in duration.
- E. Upon request of the Owner, a "DVD" of the training period shall be made available by the Fire Alarm System Contractor at no additional cost to the Owner.

END OF SECTION