

GREATER DAYTON PREMIER MANAGEMENT

Invitation for Bid

IFB# _____

Issue Date	
Pre-Bid Meeting	
Questions from Contractors Due	
Responses from GDPM to Be Posted By	
Bids Due	
Bid Opening	

Pre-Bid Meeting: Pre-bid meeting will be located at _____ on the following date: _____.

Bid-Opening: The Bid-Opening will be held virtually. Please use the following information in order to access the bid opening: _____

How to Submit Bids:

Option 1: Mail to or drop off at GDPM. The envelope must be filled out exactly as follows:

GDPM

ATTN: Procurement

SEALED BID _____

400 Wayne Avenue

Dayton, Ohio 45410

Option 2: Email GDPM:

ebid@dmha.org

The subject line must state **SEALED BID** _____

Questions about this Bid Shall be Submitted Electronically to: ebid@dmha.org.

Greater Dayton Premier Management reserves the right to reject any or all bids, or waive any informality in the bidding. No bids shall be withdrawn for a period of ninety (90) days subsequent to the opening of bids.

All bidders shall be required to meet Affirmative Action requirements and Equal Opportunity requirements. Each bidder must insure that all employees and applicants for employment are not discriminated against because of race, color, religion, national origin, disability, age, ancestry, creed, or military status.

Greater Dayton Premier Management

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The below items are part of the Bidder's Packet. *Most of these items must either be completed or signed or both and submitted with your sealed bid. Please submit forms in order.*

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INVITATION FOR BID GENERAL CONSTRUCTION SERVICES

IFB Name

Solicitation
No.

Prevailing Wage?

Proposal Due Date

Contract Term

Contractor Information

Name of Business:

Primary Contact

Street Address:

Street Address Line 2:

City:

State:

Zip Code:

Contact Number:

E-mail:*

Check at Least one
of the Following:*

Section 3

MBE/WBE

Veteran

None Apply

Are you currently
suspended,
debarred or
otherwise deemed
ineligible for a
federal contract
award?

Check box if
addendum was
reviewed (*don't check if
not applicable*)

Addendum 1

Addendum 2

Addendum 3

Addendum 4

Other

By signing below, Contractor attests that he/she has the legal power, right, and authority to make this Agreement. Contractor agrees that if selected for the Contract Award, Contractor is qualified to perform all work necessary to complete the services as specified in the Contract Documents at Contractor's quoted price. Further, Contractor has reviewed, acknowledges and accepts the provisions within the Contract Documents including, but not limited to, the Specifications, Contractor's bid, and the GDPM General Terms and Conditions for General Construction Services. Unless otherwise specified in writing by GDPM on GDPM letterhead and signed by both parties, during the term of the Contract, if any provision within the Contract Documents is in conflict with, or inconsistent with any provision with the GDPM General Terms and Conditions, the GDPM General Terms and Conditions shall prevail. Terms that conflict with and/or are inconsistent with the GDPM General Terms and Conditions are hereby revoked, rejected and void, even if the contract documents containing such terms are executed after the GDPM General Terms and Conditions, this includes, but is not limited to indemnification, warranty, payment, order of precedence, and integration provisions. By signing signing below, Contractor acknowledges that GDPM reserves it right to reject any and/or all bid or to cancel the solicitation at any time and for any reason(s). Contractor's bid shall be valid for at least 120 days subsequent to the bid opening date. GDPM Contract Documents are available at <https://www.gdpm.org/development-construction/documents/>.

Contractor Signature of Acceptance

Date

Acceptance of Proposal:

GDPM accepts your proposal and the Master Agreement containing the solicitation, General Terms and Conditions, and cost catalog are hereby in effect.

GDPM Signature of Acceptance

Date



Greater Dayton Premier Management

Enhancing Neighborhoods • Strengthening Communities • Changing Lives

Grand Fire Alarm System Replacement IFB 24-02

Greater Dayton Premier Management (GDPM) is an Ohio political subdivision and an award-winning, nationally recognized public housing authority in Montgomery County, Ohio. Additionally, GDPM is Montgomery County's largest landlord and serves approximately 16,000 individuals annually.

GDPM seeks proposals from experienced contractors to complete a replacement of the fire alarm system at the property known as Grand, located at 465 Grand Ave Dayton, OH 45405. Work of the Project includes the replacement of the fire alarm system in the building including fire alarm panel, equipment, cabling and conduits, and end use devices at Grand Hi-Rise as outlined / located on the Drawings / Specifications. All work shall be in accordance with NFPA 72 and per City of Dayton Fire Department requirements. As a result of this solicitation, GDPM intends to award the contract to the lowest, most responsible bidder and GDPM will give preference points to Section 3 Contractors (see below).

I. Project Description:

- A. Project Identification: IFB 24-02 Grand Fire Alarm Replacement
- B. Contract Documents: GDPM Specifications under this cover with separate drawings.
- C. Work Summary: The scope of work includes, but is not limited to, the following:

1. All specific scope items shall be coordinated and reviewed on the drawings and specifications as applicable.
2. Maintain existing system operational during the installation of the new fire alarm system. Coordinate all applicable requirements.
3. Remove existing fire alarm system, equipment, devices, wiring, conduits, junction boxes, etc.
4. Installation of a new digital, addressable fire alarm system with manual voice paging.
5. Installation of fire alarm equipment such as amplifiers and power extenders to support the system.
6. Installation of new audio and visual fire alarm devices in common areas and within dwelling units as outlined.
7. Repair holes in floors and walls from the removal of the existing fire alarm system. Prep and paint impacted walls / ceilings / finishes as is applicable to the work.
8. Install fire stopping at wall / ceiling penetrations as is applicable to the work. Fire Alarm System Replacement

9. Prep and paint new conduits, junction boxes to match adjacent finishes [finishes vary throughout the building – multiple colors, etc. must be anticipated.]
10. Ancillary work required to accomplish the work scope as intended.
 - a. Contractor shall provide all materials and labor for work as noted herein for a complete project.
 - i. IMPORTANT: Contractor shall field verify all existing conditions, and coordinate all applicable requirements as related to the scope of the work.
 - ii. Drawings indicate general diagrammatic areas/extent of work, but in no way indicate the intricate nature of the work required for the successful completion of the project.
 - iii. Conditions will vary between various areas of the building. All conditions shall be verified to ensure the scope is captured completely.
 - b. Contractor shall provide any and all ancillary work related to the above work scope including repair of any contractor damaged finishes within the work area.
 - c. Contractor shall be responsible for the appropriate coordination with GDPM.

II. Bid Guarantee/Payment & Performance Bonds

All bids must be accompanied by a bid guarantee equivalent to 5% of the bid price; and at least one of the following:

- A. A performance bond and payment bond for 100% of the contract price;
- B. A performance bond and a payment bond, each for 50% or more of the contract price;
- C. 20% cash escrow;
- D. A 10% irrevocable letter of credit with terms acceptable to GDPM;
- E. Any other payment method acceptable to GDPM.

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 GDPM and authorized to do business in the State of Ohio. Certified checks and bank drafts must be made payable to the order of GDPM. The guarantees shall insure the execution of the contract and the furnishing of a method of assurance of completion by the successful bidder. Failure to submit a bid guarantee with the bid may result in the rejection of the bid. Guarantees submitted by unsuccessful bidders will be returned as soon as practicable after bid opening. For your convenience, a GDPM's Form of Bid Guarantee and Payment & Performance Bond is included in this packet.

III. Davis Bacon/Prevailing Wages:

Prevailing wage requirements of the Davis-Bacon and related Acts (DBRA) apply to laborers and mechanics on federal construction and most federally assisted construction projects in excess of \$2,000. Davis Bacon Wage Rates apply to this project. Therefore, the Contractor shall follow all requirements including, but not limited to, submitting required documentation to evidence

compliance. A copy of the most recent wage determination is attached hereto. The Wage Determination in effect on the date of the bid opening will apply to this project.¹

IV. **Section 3**

The Section 3 program requires that recipients of certain HUD financial assistance, to the greatest extent possible, provide training, employment, contracting and other economic opportunities to low- and very low-income persons, especially recipients of government assistance for housing, and to businesses that provide economic opportunities to low- and very low-income persons. GDPM provides preferences to business that are registered as Section 3. For more information on Section 3 or how to register to become a Section 3 business please visit: <https://www.hud.gov/section3> or contact GDPM's Procurement Department at procurement@dmha.org.

For this solicitation, **Section 3 Contractors will receive 5% price consideration added to their final bid amount.** (A Section 3 Contractor may be awarded the Contract and not be the lowest, most responsible, responsive bidder as long as the Section 3 Contractor is within 5% of the low bid amount).

V. **Bid Preparation & Submission Requirements:**

To be considered, Contractor's bid packet must be fully completed. Please read all the Instructions carefully and contact GDPM if you have any questions. Prior to submission, ensure that the following forms are fully completed, signed and included in your Bid Packet:

- Invitation to Bid Form
- Bid Form
- Representations, Certifications, and Other Statements of Bidders
- Bid Guaranty
- Non-Collusive Affidavit & Full Disclosure
- Section 3 Form
- W-9

The Submission is in sealed bid form and may be mailed to **GDPM ATTN: Procurement BID Grand Fire Alarm, 400 Wayne Ave, Dayton, Ohio, 45410**. The Submission may be made via the lockbox located outside the main entrance of GDPM. Bids may also be submitted electronically to ebid@dmha.org. The subject line of the email must include the words: **SEALED BID Grand Fire Alarm** Electronic Bids shall be in pdf format. GDPM's bid packet is in a pdf fillable format and may be signed electronically.

VI. **GDPM General Terms & Conditions for Construction Services:**

¹ Project must start within 90 days of "lock-in" date or a new Wage Determination may apply

Please carefully read and review the relevant terms and conditions prior to submitting your proposal. GDPM's General Terms and Conditions for Construction Services is available for review at <https://www.gdpm.org/development-construction/documents/>.

VII. Additional Information May Be Required:

If you are new to doing business with GDPM or it's been more than five years since you've worked on a GDPM related project, prior to Contract Award GDPM may require additional information including, but not necessarily limited to, references and evidence of capacity to perform. GDPM will request this information only if Contractor is selected for the award. Contractor will then have 72 hours to provide the requested information. If Contractor fails to provide the requested information, the information is inadequate or the information proves disqualifying in GDPM's discretion, GDPM will cancel the award and select the next lowest bidder for the Contract Award.

VIII. Licensees & Permits:

During the term of the Contract, the Contractor shall ensure that all required licensing requirements and permitting requirements are met. The Contractor and Contractor's employees and agents shall secure and maintain in force such licenses and permits as are required by law and shall conform to all Federal, State, and local laws, ordinances, and regulations covering the Work. Failure to maintain items such as licenses or permits during the term of the Contract shall constitute a material breach thereof.

IX. Reservation of Rights:

GDPM reserves the right to reject the low bid, if, in its sole discretion, that bidder is determined not to be the best-qualified bidder or to be deficient in experience, technical proficiency or unable to provide qualified manpower to meet the specifications. GDPM reserves the rights to reject and or all bids, to waive any informality in the IFB process, or to terminate the IFB process at any time, if deemed by GDPM to be in its best interests. GDPM reserves the right not to award a contract pursuant to this IFB. GDPM reserves the right to change, modify, amend, revise or alter any of the instructions, terms, conditions, and/or specifications identified in the IFB documents within any attachment or drawing, or within any addenda issued. All addenda will be posted to GDPM's website at www.gdpm.org.

X. Questions regarding this Solicitation:

Any procedural questions regarding this Invitation for Bid shall be submitted electronically to ebid@dmha.org. Any questions related to the scope and specifications shall be submitted electronically to housingdevelopment@dmha.org. If you'd like to receive notifications concerning this solicitation, please send a request with your name and email address to housingdevelopment@dmha.org.



Bid Form

IFB No. 24-02: Grand Fire Alarm Replacement

Total Bid Price (GDPM is Tax Exempt)

Total Bid Price of:	\$ _____ (Numeric amount)	
	_____ (Written amount)	
<i>Written amount prevails if any discrepancy exists.</i>		

Bid Elements – The Total Bid Price includes the following elements:

Item	Description	Amount
1	Labor	\$
2	Materials	\$
	Contractor Base Bid	\$
3		
	Total Bid Price (Should match Total Bid Price Above)	\$

This project is funded in part by the U.S. Department of Housing and Urban Development and is subject to the following contractor cost limits: Profit: 6%; Overhead: 2%; General Requirements: 6% of hard construction costs.

Signature

Date

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

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

Representations, Certifications, and Other Statements of Bidders

Public and Indian Housing Programs

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1. Certificate of Independent Price Determination

(a) The bidder certifies that--

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

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

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

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

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

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

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

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

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

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

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

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

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

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

2. Contingent Fee Representation and Agreement

(a) Definitions. As used in this provision:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

4. Organizational Conflicts of Interest Certification

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

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

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

5. Bidder's Certification of Eligibility

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

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

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

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

6. Minimum Bid Acceptance Period

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

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

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

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

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

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

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

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

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

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

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

(Check the block applicable to you)

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

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

The bidder represents and certifies that it:

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

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

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

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

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

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

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

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

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

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

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

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

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

Notice to Prospective Subcontractors of Requirement for Certifications of Nonsegregated Facilities

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

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

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

The bidder certifies that:

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

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

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

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

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

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

13. Bidder's Signature

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

(Signature and Date)

(Typed or Printed Name)

(Title)

(Company Name)

(Company Address)

Greater Dayton Premier Management Bid Guaranty

(Ohio revised Code Section 153.571)

KNOW ALL PERSONS BY THESE PRESENTS, that we, the undersigned _____

as **PRINCIPAL**, and _____

as **SURETIES**, are hereby held and firmly bound unto **The Dayton Metropolitan Housing Authority d/b/a Greater Dayton Premier Management (GDPM)**, as Obligee, in the penal sum of the dollar amount of the bud submitted by the Principal to GDPM on the ____ day of _____, 20__ to undertake the Project known as:

PROJECT NAME: _____

Solicitation No.: _____

The penal sum referred to herein shall be the dollar amount of the Principal's bid to GDPM, incorporating any additive or deductive alternate bids made by the Principal on the date referred to above to GDPM, which are accepted by GDPM. In no case shall the penal sum exceed the amount of _____ dollars. (If the foregoing blank is not filled in, the penal sum will be the full amount of the Principal's bid, including alternates. Alternatively, if the blank is filled in, the amount stated must not be less than the full amount of the bid including alternates, in dollars and cents. A percentage is not acceptable.) For the payment of the penal sum well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors, and assigns.

SIGNED this _____ day of _____, 20__.

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, that whereas the above-named Principal has submitted a bid for the above referenced Project.

NOW, THEREFORE, if GDPM accepts the bid of the Principal and the Principal fails to enter into a proper contract in accordance with the bid, plans, details, specifications, bills of material and all other solicitation documents; and in the event the Principal pays GDPM the difference not to exceed ten per cent of the penalty hereof between the amount specified in the bid and such larger amount for which GDPM may in good faith contract with the next lowest bidder to perform the work covered by the bid; or in the event GDPM does not award the contract to the next lowest bidder and resubmits the Project for bidding, the Principal pays to GDPM the difference not to exceed ten per cent of the penalty hereof between the amount specified in the bid, or the costs, in connection with the resubmission, of printing new contract documents, required advertising, and printing and mailing notices to prospective bidders, whichever is less, then this obligation shall be null and void, otherwise to remain in full force and effect; if GDPM accepts the bid of the Principal and the Principal within ten days after the awarding of the Contract enters into a proper Contract in accordance with the bid, plans, details, specifications, bills of material and all other solicitation documents which said Contract is made a part of this bond the same as though set forth herein;

AND FURTHER, if the said Principal shall well and faithfully do and perform the things agreed by GDPM to be done and performed according to the terms of said Contract; and shall pay all lawful claims of subcontractors, materials suppliers, and laborers, for labor performed and materials furnished in the carrying forward, performing, or completing of said Contract; we agreeing and assenting that this undertaking shall be for the benefit of any materials suppliers or laborer having a just claim, as well as for the obligee herein; then this obligation shall be void; otherwise the same shall remain in full force and effect; it being expressly understood and agreed that the liability of the surety for any and all claims hereunder shall in no event exceed the penal amount of this obligation as herein stated.

AND FURTHER, the Principal will correct or replace any defective work or materials discovered by GDPM within a period of one year from the date of acceptance of such work or material by GDPM, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

THE SAID Surety hereby stipulates and agrees that no modifications, omissions, or additions, in or to the terms of the said Contract or in the Plans and Specifications therefor shall in any wise affect the obligations of said Surety on its bond, and it does hereby waive notice of any such modifications, omissions, or additions, in or to the terms of the Contract, the Work or the Contract Documents, including, without limitation the Plans and Specifications.

< Remainder of page intentionally left blank >

PRINCIPAL:

Principal Signature

By: _____

Title: _____

SURETY:

Surety Signature

By: _____
Attorney-in-Fact

Surety Agent's Information:

Agency Name

Street

City State Zip

Telephone No.

(Attach hereto the current Power of Attorney of the person executing this bond for the Surety.)

Non-Collusive Affidavit and Full Disclosure Statement

Non-Collusive Affidavit: The undersigned party hereby certifies that this proposal/bid is genuine and not collusive or sham; that said offeror has not colluded, conspired, connived or agreed, directly or indirectly, with any offeror 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 or any other offeror, or to fix any overhead, profit or cost element of said bid price, or of that of any other offeror, or to secure any advantage against the Greater Dayton Premier Management or any person interested in the proposed contract; and that all statements in said proposal or bid are true.

Disclosure: The undersigned certifies that I, nor any member of my immediate family does not now, and has not for the preceding two years, had any interest, whatsoever, whether direct, or indirect, in GDPM or any of its members or officials including but not limited to any interest which yields or has the potential of yielding directly or indirectly a monetary or other material gain or benefit with any employees, officers and commissioners of GDPM and members of their immediate family, or any interest arising from blood or marriage or from close business association, notwithstanding whether any financial interest is involved with any employees, officers and commissioners of GDPM members of their families or employment or services rendered as a member, official or officer of GDPM.

Signature: _____

Signature: _____

Title: _____

(Company Name)

Request for Taxpayer Identification Number and Certification

**Give Form to the
 requester. Do not
 send to the IRS.**

▶ Go to www.irs.gov/FormW9 for instructions and the latest information.

Print or type. See Specific Instructions on page 3.	1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.	
	2 Business name/disregarded entity name, if different from above	
	3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only one of the following seven boxes.	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):
	<input type="checkbox"/> Individual/sole proprietor or single-member LLC <input type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate	Exempt payee code (if any) _____
	<input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ _____ Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.	Exemption from FATCA reporting code (if any) _____
	<input type="checkbox"/> Other (see instructions) ▶ _____	<i>(Applies to accounts maintained outside the U.S.)</i>
	5 Address (number, street, and apt. or suite no.) See instructions.	Requester's name and address (optional)
6 City, state, and ZIP code		
7 List account number(s) here (optional)		

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number									
-				-					
or									
Employer identification number									
-									

Part II Certification

Under 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 (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

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 or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here	Signature of U.S. person ▶	Date ▶
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General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting*, later, for further information.

Note: If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien;
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;
- An estate (other than a foreign estate); or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States.

- In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Pub. 515, *Withholding of Tax on Nonresident Aliens and Foreign Entities*).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items.

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

Backup Withholding

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 24% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the instructions for Part II for details),
3. The IRS tells the requester that you furnished an incorrect TIN,
4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or
5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code*, later, and the separate Instructions for the Requester of Form W-9 for more information.

Also see *Special rules for partnerships*, earlier.

What is FATCA Reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code*, later, and the Instructions for the Requester of Form W-9 for more information.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account (other than an account maintained by a foreign financial institution (FFI)), list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9. If you are providing Form W-9 to an FFI to document a joint account, each holder of the account that is a U.S. person must provide a Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

Note: ITIN applicant: Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or “doing business as” (DBA) name on line 2.

c. **Partnership, LLC that is not a single-member LLC, C corporation, or S corporation.** Enter the entity’s name as shown on the entity’s tax return on line 1 and any business, trade, or DBA name on line 2.

d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a “disregarded entity.” See Regulations section 301.7701-2(c)(2)(iii). Enter the owner’s name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner’s name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity’s name on line 2, “Business name/disregarded entity name.” If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

Line 3

Check the appropriate box on line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box on line 3.

IF the entity/person on line 1 is a(n) . . .	THEN check the box for . . .
• Corporation	Corporation
• Individual • Sole proprietorship, or • Single-member limited liability company (LLC) owned by an individual and disregarded for U.S. federal tax purposes.	Individual/sole proprietor or single-member LLC
• LLC treated as a partnership for U.S. federal tax purposes, • LLC that has filed Form 8832 or 2553 to be taxed as a corporation, or • LLC that is disregarded as an entity separate from its owner but the owner is another LLC that is not disregarded for U.S. federal tax purposes.	Limited liability company and enter the appropriate tax classification. (P= Partnership; C= C corporation; or S= S corporation)
• Partnership	Partnership
• Trust/estate	Trust/estate

Line 4, Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space on line 4 any code(s) that may apply to you.

Exempt payee code.

- Generally, individuals (including sole proprietors) are not exempt from backup withholding.
- Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.
- Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.
- Corporations are not exempt from backup withholding with respect to attorneys’ fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

- 1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)
- 2—The United States or any of its agencies or instrumentalities
- 3—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- 4—A foreign government or any of its political subdivisions, agencies, or instrumentalities
- 5—A corporation
- 6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession
- 7—A futures commission merchant registered with the Commodity Futures Trading Commission
- 8—A real estate investment trust
- 9—An entity registered at all times during the tax year under the Investment Company Act of 1940
- 10—A common trust fund operated by a bank under section 584(a)
- 11—A financial institution
- 12—A middleman known in the investment community as a nominee or custodian
- 13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 ¹	Generally, exempt payees 1 through 5 ²
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

¹ See Form 1099-MISC, Miscellaneous Income, and its instructions.

² However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B—The United States or any of its agencies or instrumentalities

C—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)

E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)

F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G—A real estate investment trust

H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I—A common trust fund as defined in section 584(a)

J—A bank as defined in section 581

K—A broker

L—A trust exempt from tax under section 664 or described in section 4947(a)(1)

M—A tax exempt trust under a section 403(b) plan or section 457(g) plan

Note: You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns. If this address differs from the one the requester already has on file, write NEW at the top. If a new address is provided, there is still a chance the old address will be used until the payor changes your address in their records.

Line 6

Enter your city, state, and ZIP code.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN.

If you are a single-member LLC that is disregarded as an entity separate from its owner, enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note: See *What Name and Number To Give the Requester*, later, for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at www.SSA.gov. You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at www.irs.gov/Businesses and clicking on Employer Identification Number (EIN) under Starting a Business. Go to www.irs.gov/Forms to view, download, or print Form W-7 and/or Form SS-4. Or, you can go to www.irs.gov/OrderForms to place an order and have Form W-7 and/or SS-4 mailed to you within 10 business days.

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note: Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, 4, or 5 below indicates otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code*, earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983.

You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983.

You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions.

You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), ABLE accounts (under section 529A), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account) other than an account maintained by an FFI	The actual owner of the account or, if combined funds, the first individual on the account ¹
3. Two or more U.S. persons (joint account maintained by an FFI)	Each holder of the account
4. Custodial account of a minor (Uniform Gift to Minors Act)	The minor ²
5. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee ¹
b. So-called trust account that is not a legal or valid trust under state law	The actual owner ¹
6. Sole proprietorship or disregarded entity owned by an individual	The owner ³
7. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i)(A))	The grantor*
For this type of account:	Give name and EIN of:
8. Disregarded entity not owned by an individual	The owner
9. A valid trust, estate, or pension trust	Legal entity ⁴
10. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
11. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
12. Partnership or multi-member LLC	The partnership
13. A broker or registered nominee	The broker or nominee

For this type of account:	Give name and EIN of:
14. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
15. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B))	The trust

¹ List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

² Circle the minor's name and furnish the minor's SSN.

³ You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

⁴ List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships*, earlier.

*Note: The grantor also must provide a Form W-9 to trustee of trust.

Note: If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records From Identity Theft

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Pub. 5027, Identity Theft Information for Taxpayers.

Victims of identity theft who are experiencing economic harm or a systemic problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes.

Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to phishing@irs.gov. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at spam@uce.gov or report them at www.ftc.gov/complaint. You can contact the FTC at www.ftc.gov/idtheft or 877-IDTHEFT (877-438-4338). If you have been the victim of identity theft, see www.IdentityTheft.gov and Pub. 5027.

Visit www.irs.gov/IdentityTheft to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.



Greater Dayton Premier Management

Enhancing Neighborhoods • Strengthening Communities • **Changing Lives**

Prospective Business Vendor:

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

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

Section 3 Required Forms:

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

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

Procurement@dmha.org



Greater Dayton Premier Management Section 3 Assurance of Compliance Form

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

- A. The project assisted under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 170u. Section 3 requires that to the *greatest extent feasible, newly created opportunities* that are generated by the awarding of this contract be given to:
- Section 3 Workers upon their qualifications. 25% or more of all labor hours worked by all workers employed with PHA financial assistance must be Section 3 workers.
 - 5% or more of all labor hours worked by all workers employed with PHA financial assistance must be Targeted Section 3 workers.
- B. Notwithstanding any other provision of this contract, the applicant shall carry out the provisions of said Section 3 and the regulations issued pursuant thereto by the Secretary set forth in 24 CFR Part 75, and all applicable rules and orders of the Secretary issued thereunder prior to the execution of this contract. The requirements of said regulations include but are not limited to development and implementation of a Section 3 Action Plan/Strategy for utilizing Section 3 Business Concerns; the making of a good faith effort, as defined by the regulation, to provide training, employment and business opportunities required by Section 3; and incorporation of the "Section 3 Clause" specified by Section 75.9 and 75.17 of the regulations in all contracts for work in connection with the project. The applicant and recipient agency, certifies and agrees that it is under no contractual or other disability which would prevent it from complying with these requirements.
- C. Compliance with the provision of Section 3, the regulations set forth in 24 CFR Part 75, and all applicable rules and orders of the Secretary issued thereunder prior to approval by the Government of the application of this contract, shall be a condition of the Federal financial assistance provided to the project, binding upon the applicant, its contractors and subcontractors, its successors, and assigns to the sanctions specified by the contract, and to such sanctions as are specified by 24 CFR Section 75.

Applicant: _____

Signature: _____

Address: _____

Date: _____

Section 3 Clause

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

- A. The work to be performed under this contract is subject to the requirements of section 3 of the Housing and Urban Development Act of 1968, as amended, [12 U.S.C. 1701u](#) (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.
- B. The parties to this contract agree to comply with HUD's regulations in 24 CFR part 75, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 75 regulations.
- C. The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.
- D. The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 75, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 75. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 75.
- E. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 75.9 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR part 75.9
- F. Noncompliance with HUD's regulations in 24 CFR part 75 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.
- G. In the event of a determination by the Executive Director or his/her designee that the Contractor is not in compliance with the section 3 clause or any rule, regulation, or report submission requirements of the GDPM, this contract may be canceled, terminated, or suspended in whole or in part, and the Contractor may be declared ineligible for further GDPM contracts for a period of one to three years.



Contractor

Section 3 Action Plan Submission

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

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

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

Name(s): _____

Contact Info: _____

Title(s): _____

Section 3 Subcontracting Opportunity Strategies

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

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

- Commit that when subcontracting occurs, 10% of the total dollar amount subcontracted out by the company and/or by subcontractors will go to Section 3 Business Concerns. **Required**
- Contact the GDPM Section 3 Compliance Department regarding all new subcontracting opportunities. **Required**
- Provide the GDPM Section 3 Compliance Department with a monthly report listing all subcontracting opportunities. **Required**
- Advertise new contracting opportunities in community (sites) and diversity newspapers/websites.
- Maintain a file of eligible qualified Section 3 Business Concerns for future contracting opportunities.
- Incorporate into contract (after selection of bidders but prior to the execution of contracts), a negotiated provision for a specific amount of work to be contracted with Section 3 Business Concern(s) during the contract.
- Sponsor or participate in minority, women, small business expositions and or conferences in the Dayton, Ohio area to network and promote contracting opportunities with Section 3 Business Concerns.
- Outreach to business assistance agencies, minority contracting associations, community organizations, to network and promote contracting opportunities with Section 3 Business Concerns.
- Contact/Meet with Resident Associations informing them of new contracting opportunities.
- Outreach to trade/labor organizations to network and promote contracting opportunities with Section 3 Business Concerns.
- Host/Facilitate workshops geared to Section 3 Business concerns on contracting procedures and opportunities.

Other:

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

Signature: _____

Date: _____



GREATER DAYTON PREMIER MANAGEMENT SECTION 3 CERTIFICATION FOR PREFERENCE

Please note that a contract with Greater Dayton Premier Management is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended **AND** to the Section 3 Action Plan submitted with the proposal for this project.

Type of Business: Corporation Partnership Sole Proprietorship Joint Venture LLC MBE WBE
(check all that apply)

Business Name: _____

Contact Person: _____ Phone: _____ Email: _____

You self-certify that your business is, documented within the last six months a Section 3 Business Concern based on one of the below eligibility criteria's. (Check the one that qualifies your business):

Category 1

51 percent or more owned and controlled by low- or very low-income persons (based on household income under HUD-income limits); **or**

Category 2

75 percent or more of the business labor hours to perform the business are performed by low-very low income persons; **or**

Category 3

51 percent owned and controlled by current residents of public housing or Section 8-assisted housing.

OR

My business does not meet the Section 3 eligibility criteria and wishes to forgo Section 3 preferences in the awarding of this contract, but understand that we are still responsible for meeting Section 3 compliance.

"I hereby certify that the information provided on this form is true and correct, and understand any falsification of any of the information could subject me to punishment under the law."

Signature _____ Date _____
Authorized Signer

Title: _____

If you would like more information or to register your business in the Section 3 program, please send an email to Procurement@dmha.org.

Section 3 is a provision of the Housing and Urban Development (HUD) Act of 1968 that helps foster local economic development, neighborhood economic improvement, and individual self-sufficiency. The Section 3 program requires that recipients of certain HUD financial assistance, to the greatest extent feasible, provide job training, employment, and contracting opportunities for low-or very- low income residents in connection with projects and activities in their neighborhoods.

Is your Bid Packet Complete?



Are the following forms completed, signed and in your Bid Packet?

- 1. Invitation for Bid Form**
- 2. Bid Form**
- 3. Representations, Certifications, and other Statements of Bidders**
- 4. Bid Guaranty & Bond Form**
- 5. Non-Collusive Affidavit & Full Disclosure Form**
- 6. Section 3 Form**
- 7. W-9**

"General Decision Number: OH20240093 01/05/2024

Superseded General Decision Number: OH20230093

State: Ohio

Construction Type: Building

County: Montgomery County in Ohio.

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

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

<p>If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:</p>	<ul style="list-style-type: none"> . Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least \$17.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2024.
<p>If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:</p>	<ul style="list-style-type: none"> . Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least \$12.90 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2024.

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

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

Modification Number Publication Date
 0 01/05/2024

ASBE0008-010 03/01/2023

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR.....	\$ 33.08	20.69

BROH0022-005 06/01/2022

	Rates	Fringes
BRICKLAYER.....	\$ 30.15	16.91

BROH0022-011 07/01/2022

	Rates	Fringes
TILE FINISHER.....	\$ 26.36	9.97

ELEC0082-004 12/05/2022

	Rates	Fringes
ELECTRICIAN.....	\$ 34.25	21.26

ELEV0011-002 01/01/2023

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 52.72	37.335+a+b

PAID HOLIDAYS:

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

b. Employer contributes 8% of regular hourly rate to vacation pay credit for employee who has worked in business more than 5 years; 6% for less than 5 years' service.

ENGI0018-034 05/01/2018

	Rates	Fringes
POWER EQUIPMENT OPERATOR Crane.....	\$ 35.89	15.09

ENGI0066-045 06/01/2017

	Rates	Fringes
POWER EQUIPMENT OPERATOR Forklift.....	\$ 28.87	19.66
Grader/Blade.....	\$ 32.42	19.66
Mechanic.....	\$ 32.92	19.66

IRON0044-020 06/01/2023

	Rates	Fringes
IRONWORKER, ORNAMENTAL.....	\$ 32.37	23.30

IRON0290-006 06/01/2023

	Rates	Fringes
IRONWORKER (Reinforcing and Structural).....	\$ 32.69	24.05

LAB01410-005 04/05/2023

	Rates	Fringes
LABORER		
Asbestos Abatement (Removal from Ceilings, Floors, and Walls).....	\$ 30.35	12.65
Mason Tender - Brick.....	\$ 30.95	12.65

PAIN0249-005 05/01/2023

	Rates	Fringes
PAINTER (Brush and Roller).....	\$ 26.23	12.56

PAIN0387-002 11/01/2022

	Rates	Fringes
GLAZIER.....	\$ 30.33	17.22

PLUM0050-009 07/03/2023

	Rates	Fringes
PIPEFITTER (Excludes HVAC Pipe Installation).....	\$ 47.15	24.21

PLUM0162-008 06/01/2022

	Rates	Fringes
PLUMBER (HVAC Pipe Installation Only).....	\$ 36.47	26.80

ROOF0042-001 08/01/2023

	Rates	Fringes
ROOFER.....	\$ 32.00	19.00

SFOH0669-009 04/01/2023

	Rates	Fringes
SPRINKLER FITTER (Fire Sprinklers).....	\$ 43.08	26.91

UAVG-OH-0021 01/01/2019

	Rates	Fringes
OPERATOR: Oiler.....	\$ 27.56	16.37

UAVG-OH-0025 01/01/2018

Rates Fringes

SHEET METAL WORKER, Excludes
HVAC Duct and Unit

Installation.....\$ 28.10 23.41

UAVG-OH-0031 01/01/2018

Rates Fringes

BRICKLAYER: TILE SETTER.....\$ 26.09 12.30

SUOH2012-095 08/29/2014

Rates Fringes

CARPENTER.....\$ 21.59 5.70

CEMENT MASON/CONCRETE FINISHER...\$ 26.07 12.34

DRYWALL HANGER AND METAL STUD
INSTALLER.....\$ 21.02 4.21

FORM WORKER.....\$ 22.41 9.01

LABORER: Common or General.....\$ 20.87 5.92

LABORER: Mason Tender -
Cement/Concrete.....\$ 22.95 8.60

LABORER: Pipelayer.....\$ 23.98 8.58

OPERATOR:
Backhoe/Excavator/Trackhoe.....\$ 33.36 6.13

OPERATOR: Bobcat/Skid
Steer/Skid Loader.....\$ 30.26 12.58

OPERATOR: Bulldozer.....\$ 26.01 4.95

OPERATOR: Loader.....\$ 29.99 12.80

OPERATOR: Paver (Asphalt,
Aggregate, and Concrete).....\$ 30.28 13.29

OPERATOR: Roller.....\$ 28.25 12.61

PAINTER: Spray.....\$ 22.78 12.40

PLUMBER, Excludes HVAC Pipe
Installation.....\$ 26.21 12.51

SHEET METAL WORKER (HVAC Duct
and HVAC Unit Installation
Only).....\$ 24.28 10.50

TRUCK DRIVER: Dump (All Types)...\$ 22.08 11.51

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

=====

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave
for Federal Contractors applies to all contracts subject to the
Davis-Bacon Act for which the contract is awarded (and any

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

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

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

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates

the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

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

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

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

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor

200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

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

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

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

Specifications for:

Fire Alarm System Replacement Grand Hi-Rise OH5-2, AMP 1

465 West Grand Avenue
Dayton, OH 45405



Prepared for:

Greater Dayton Premier Management

400 Wayne Avenue
Dayton, Ohio 45410
937.910.7500

Website posting at www.gdpm.org

Prepared by:



RDA GROUP ARCHITECTS

7662 PARAGON ROAD | DAYTON, OH 45459 | 937.610.3440

**Bid Set
February 7, 2024**

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DOCUMENT 00 01 10 - TABLE OF CONTENTS

TECHNICAL SPECIFICATIONS

00 01 10	Table of Contents
01 00 00	General Requirements
01 25 00	Substitutions
01 29 00	Payment Procedures
01 33 00	Submittal Procedures
01 40 00	Quality Requirements/Project Inspection
01 77 00	Closeout Requirements
02 41 16	Selective Demolition
02 50 00	Hazardous Materials Specifications
07 84 00	Firestopping
07 90 00	Joint Protection
09 21 16	Gypsum Board Assemblies
09 90 00	Painting and Coating
16 00 00	Electrical

DRAWINGS

G1.1	Project Information
A1.1	Existing First / Second Floor Plans
A1.2	Existing Third / Fourth Floor Plans
A1.3	Existing Fifth / Sixth Floor Plans
A1.4	Existing Seventh / Eighth Floor Plans
A1.5	Existing Ninth / Penthouse Floor Plans
E-1	Riser Diagram / Symbols Legend
E-2	First Floor Plan
E-3	Second – Ninth Floor Plan
E-4	Penthouse Floor Plan

END OF DOCUMENT

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00 41 13 - BID FORM

To: GREATER DAYTON PREMIER MANAGEMENT
400 Wayne Avenue
Dayton, OH 45410

Project: **Fire Alarm System Replacement – Grand Hi-Rise OH5-2**

Bidder: _____

Date: _____

OFFER

Having examined the Place of The Work and all matters referred to in the Bid Documents and Contract Documents, GDPM General Terms and Conditions for Construction Services, HUD Documents, and related forms and affidavits, prepared by RDA Group Architects on behalf of Greater Dayton Premier Management for the above mentioned project, we the undersigned, hereby proposed to furnish all labor, specified materials, equipment and services required for Fire Alarm System Replacement at Grand Hi-Rise, all in accordance with and for the sum of:

ADDENDA:

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

BID ITEM #1: FIRE ALARM SYSTEM REPLACEMENT AT GRAND HI-RISE: ALL LABOR, MATERIALS, EQUIPMENT and PERMIT FEES for the sum of

Base Bid Amount	\$ _____
Contingency Allowance –	<u>\$25,000</u>
Permit Allowance –	<u>\$5,000</u>

Total Bid Amount including All Allowances

\$ _____	\$ _____
[FIGURES]	[WORDS]

Contractors Note the Following:

1. Project is intended for award to one contractor for the base bid amount with consideration of the alternates listed/selected by the GDPM. GDPM intends to award the project providing it is within the funding limits, available budget, and overall estimate for the project.
2. The selection of the lowest and best bidder is based on the lowest with any required alternates that are required to be removed. Lowest and best bidder can also include factoring in MBE/DBE participation and consideration of MBE prime contractors. Section 3 preference may also be considered.

ALTERNATES: NONE

UNIT PRICES: NONE

SECURITY

Security in the sum of: _____ (\$ _____) in the form of a _____ is submitted herewith in accordance with the specifications.

ACCEPTANCE

In submitting this bid, it is understood that the right is reserved to reject any and all bids. If written notice of the acceptance of this bid is mailed, telegraphed, or delivered to the undersigned within one hundred twenty (120) days after the opening thereof, the undersigned agrees to execute and deliver a contract in the prescribed form and furnish the required bonding within ten (10) days after the contract is presented for signature.

Greater Dayton Premier Management reserves the right to reject any and all bids or award only a portion of the project as it bests fits with the goals of GDPM.

PROJECT CHANGES

Contractor shall indicate the amount of overhead and profit to be added to changes to the project.

For ADDS to the work: **Overhead** _____% **Profit** _____%

For DEDUCTS to the work: **Overhead** _____% **Profit** _____%

GDPM reserves the right to negotiate Contractor Overhead and Profit Margins with the selected Bidder.

CONTRACT TIME

Work shall be completed within _____ calendar days from Notice to Proceed.
Maximum 150 calendar days.

BIDDER CERTIFICATIONS

The Bidder hereby acknowledges that the following representations in this bid are material and not mere recitals:

1. The undersigned, having carefully read and examined the "Notice to Bidders", "Instructions to Bidders", "General Conditions", "General Requirements", "Specifications", "Plans" and any addendum for: **Fire Alarm System Replacement at Grand Hi-Rise** - as prepared by RDA Group Architects, LLC., and having inspected the premises and all conditions affecting the work, the undersigned proposes to furnish all materials and perform all labor necessary for the performance and completion of the work indicated below, all in compliance with the documents named above, and further agrees that each separate item or trade or employment entered in this Proposal shall be considered as a separate bid for that kind of work. The undersigned further agrees that, if any or all of said bids are accepted, he will enter into a Contract according to the form required by the

- Owner for the faithful performance of the labor and the furnishing of all materials included in such bid or bids so accepted.
2. In submitting this bid it is understood that the Greater Dayton Premier Management reserves the right to reject any and all bids. It is agreed that this bid may not be withdrawn for a period of one hundred twenty (120) days subsequent to the opening of bids without the consent of Greater Dayton Premier Management.
 3. Attached hereto is an affidavit in proof that the undersigned has not entered into collusion with any person in respect to this bid or any other bid or the submitting of bids for the contract for which this bid is submitted. Also attached is a statement of Contractor's qualifications.
 4. Bidder hereby agrees to comply with all City, State and Federal Statutes relating to Liability Insurance, Working Hour, Safety and Sanitary Regulations. Bidder further agrees that their bid amount includes all fees for permits, taxes, and insurance required or applicable to the work.
 5. The Bidder will sign his bid on the line indicated below; if it will be a partnership the firm name will be signed, followed by the signature of the partner signing, his own name to be signed on the line beginning with the work "By"; if a corporation, name will be signed followed by the signature and the official title of the officer signing name
 6. The Bidder has read and understands the Contract Documents and agrees to comply with all requirements of the Contract Documents, regardless of whether the Bidder has actual knowledge of the requirements and regardless of any statement or omission made by the Bidder which might indicate a contrary intention.
 7. The Bidder represents that the bid is based upon the Standards specified in the Contract Documents.
 8. The Bidder has visited the project site, become familiar with the local conditions and has correlated personal observations about the requirements of the Contract Documents. The Bidder has no outstanding questions regarding the interpretation or clarification of the Contract Documents.
 9. The Bidder and each person signing on behalf of the Bidder certifies, and in the case of a joint or combined bid, each party thereto certifies as to such parties organization, under penalty of perjury, that to the best of the undersigned's knowledge and belief: a) the Base Bid, any Unit Prices and any Alternate Bid in the bid having been arrived at independently without collusion, consultation, communication or agreement, for the purpose of restricting competition as to any matter relating to such Base Bid, Unit Prices or Alternate Bid, with any other; b) unless otherwise required by law, the Base Bid, any Unit Prices and any Alternate bid in the bid have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder prior to the bid opening, directly or indirectly, to any other Bidder who would have any interest in the Base Bid, Unit Prices or Alternate Bid; c) no attempt has been made or will be made by the Bidder to induce any other individual, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.
 10. The Bidder will enter into and execute the Contract with Greater Dayton Premier Management (GDPM). If a Contract is awarded on the basis of this bid, and if the Bidder does not execute a Contract for any reason, other than as authorized by law, the Bidder and the Bidder's Surety are liable to GDPM as indicated in the Instructions to Bidders and in the General Conditions of the Contract.
 11. The Bidder certifies that upon the award of a Contract, the Contractor will make a good faith effort to ensure that all of the Contractor's employees, while working on the project site, will not purchase, transfer, use or possess illegal drugs or alcohol or abuse prescription drugs in any way.
 12. GDPM reserves the right to reject any/all bids for any reason.
 13. Bid Bond or Certified Check is included as part of Contractor's bid submittal:

_____ Yes _____ No Bidder Initials _____

14. Affidavit of Intent to Store Materials is included as part of Contractor's bid submittal:

_____ Yes _____ No Bidder Initials _____

15. MBE Participation: GDPM has established goals of twenty-five (25%) Minority Business Enterprise Participation. To achieve this goal, contractors are encouraged to engage in joint ventures with MBE's to include MBE's as subcontractors, and utilize other initiatives that enhance opportunities for MBE's. Should the contractor be unable to achieve this goal, supporting documentation and notarized affidavits, indicating MBE's date of notification, MBE's date of response, nature of response or no response. Provide conclusion as to why the bid submitted does not meet MBE requirements. The bid submittal includes a minimum of 25% MBE Participation:

_____ Yes _____ No Bidder Initials _____

BID FORM SIGNATURES

If the Bidder is a Corporation, partnership or sole proprietorship, an officer, partner or principal of the Bidder, as applicable, shall print or type the legal name of the Bidder on the line provided and sign the Bid Form. If the Bidder is a joint venture, an officer, partner or principal, as applicable, of each member of the joint venture shall print or type the legal name of the applicable member on the line provided and sign the Bid Form. All signatures must be original.

Bidder/Company Name: _____

Authorized Signature: _____

Print name: _____

Title: _____

Mailing Address: _____

Telephone Number: _____

Facsimile Number: _____

Where Incorporated: _____

Federal Tax ID#: _____

If the bid is a joint venture or partnership, add additional forms of execution for each member of the joint venture in the appropriate form or forms as above.

END OF DOCUMENT

SECTION 01 00 00 - GENERAL REQUIREMENTS

PART 1 GENERAL

1.1 DESCRIPTION OF THE PROJECT DOCUMENTS

- A. The work covered by these specifications consists of furnishing all labor, equipment and materials necessary in connection with a Fire Alarm System Replacement Project at Grand Hi-Rise for Greater Dayton Premier Management. Work includes items as shown, subject to the terms and conditions of the contract, specifications and the drawings as listed.

1.2 CONTRACT DESCRIPTION

- A. Project Identification: **Fire Alarm System Replacement
Grand Hi-Rise**
- B. Project Location: GRAND HI-RISE OH5-2, AMP 1
465 W. Grand Avenue
Dayton, OH 45405
- C. Owner: Greater Dayton Premier Management
400 Wayne Avenue
Dayton, OH 45410
- D. Architect: RDA Group Architects, LLC
7662 Paragon Road
Dayton, OH 45459
937.610.3440 phone
- E. Electrical Engineer: Helmig Lienesch, LLC
410 S. Jefferson Street
Dayton, OH 45402
937.228.4007 phone
- F. Perform Work of Contract under a stipulated sum contract with Owner in accordance with Conditions of Contract.

1.3 SCOPE OF WORK

- A. Work of the Project includes the replacement of the fire alarm system in the building including fire alarm panel, equipment, cabling and conduits, and end use devices at Grand Hi-Rise as outlined / located on the Drawings / Specifications. All work shall be in accordance with NFPA 72 and per City of Dayton Fire Department requirements.
1. All specific scope items shall be coordinated and reviewed on the drawings and specifications as applicable.
 2. Maintain existing system operational during the installation of the new fire alarm system. Coordinate all applicable requirements.
 3. Remove existing fire alarm system, equipment, devices, wiring, conduits, junction boxes, etc.
 4. Installation of a new digital, addressable fire alarm system with manual voice paging.
 5. Installation of fire alarm equipment such as amplifiers and power extenders to support the system.
 6. Installation of new audio and visual fire alarm devices in common areas and within dwelling units as outlined.
 7. Repair holes in floors and walls from the removal of the existing fire alarm system. Prep and paint impacted walls / ceilings / finishes as is applicable to the work.
 8. Install firestopping at wall / ceiling penetrations as is applicable to the work.

9. Prep and paint new conduits, junction boxes to match adjacent finishes [finishes vary throughout the building – multiple colors, etc. must be anticipated.]
 10. Ancillary work required to accomplish the work scope as intended.
- B. Contractor shall provide all materials and labor for work as noted herein for a complete project.
1. **IMPORTANT:** Contractor shall field verify all existing conditions, and coordinate all applicable requirements as related to the scope of the work.
 2. Drawings indicate general diagrammatic areas/extent of work, but in no way indicate the intricate nature of the work required for the successful completion of the project.
 3. Conditions will vary between various areas of the building. All conditions shall be verified to ensure the scope is captured completely.
- C. Contractor shall provide any and all ancillary work related to the above work scope including repair of any contractor damaged finishes within the work area.
- D. Contractor shall be responsible for the appropriate coordination with GDPM.

1.4 CONTRACTOR'S USE OF PREMISES

- A. Provide and maintain a safe living environment for Residents of the building at all times during the course of work. The building will remain OCCUPIED throughout the duration of the work.
1. Provide fire watch as required by City of Dayton Fire Department, and in particular during any times of outages in the system.
 2. Contractor to coordinate daily with any planned outages, or the need to place the system in test mode, construction, etc.
- B. Contractor shall provide a clearly defined project schedule to GDPM for the work of this contract.
1. It is anticipated that the work will be executed on a floor by floor basis. All work shall be coordinated to efficiently move from floor to floor in a logical manner.
 2. Contractor shall be responsible for the appropriate notification of GDPM and Residents. Coordinate with GDPM as appropriate.
 3. Provide minimum 48 hour notice prior to entering any dwelling unit.
- C. Contractor shall provide all required temporary protection to minimize the spread of dust, dirt, and debris to other portions of the building, in particular during dusty activities such as core drilling concrete floors, concrete block walls, etc.
- D. Contractor shall provide temporary protection of adjacent finishes at the work areas as well as any areas traversed to the building entrances, etc.
- E. Use of the elevators is permitted. Contractor shall be responsible to provide protection of the elevator to prevent damages.
- F. It is the Contractor's responsibility to determine how the various disciplines work together and are scheduled to permit the work as outlined.
- G. Work Hours: 8 AM to 5 PM Monday thru Friday, unless work outside of these hours and days is requested and granted by Owner.
- H. Contractor shall provide a detailed construction schedule with specific dates, activities, etc. to GDPM to coordinate with residents.
1. Coordinate with GDPM to minimize conflict, and to facilitate residents as necessary.
 2. Update schedules as appropriate for weather delays, progress, etc.
- I. Daily work wrap up: The Contractor shall plan the work and provide enough manpower to this contract to ensure that work progresses in an orderly manner. The existing fire alarm system must remain in operation during the course of the project.
- J. Project shall be staffed every day with a full crew capable of timely completion of work.

- K. Contractor shall have all in-house and sub-contractors staffing scheduled, materials, accessories, etc. on-site and ready for installation prior to beginning work for any particular day. Advise project team if there are issues with scheduling prior to starting of work.

1.5 CONTRACT PERIOD / TIME OF COMPLETION

- A. Contract Period
 - 1. Upon issuance of a contract from the Owner, Supply a work start date within [5] working days. A start date and completion date will be negotiated and a notice to proceed will be issued stating those dates.
 - 2. Consideration for material lead-times will be given for establishing the NTP dates as applicable.
 - 3. Notify the Architect, in writing, upon determination of any delay in material delivery.
- B. The time for completion of this contract work is ONE HUNDRED FIFTY [150] calendar days from the date of the Notice to Proceed.
 - 1. The start date established on the notice to proceed will be communicated and agreed to between GDPM and the Contractor upon execution of the Owner-Contractor Agreement.
 - 2. Final schedule and phasing will be coordinated with the contractor.
- C. The Contractor shall notify GDPM in writing fourteen [14] days prior to the Contract Completion date if an extension of contract time is necessary with a request for the extension and the reasoning for such request.
 - 1. Failure to comply may result in enforcement of liquidated damages, cancellation of the contract, and possible disablement from future bidding opportunities.
- D. The Contractor shall notify GDPM in writing seven [7] days prior to substantial completion of the project.
- E. It is anticipated that the work of this contract will be accomplished Winter / Spring 2023-2024. It will be up to the contractor's responsibility to expedite submittals process and order materials to accommodate the construction schedule.
- F. Coordinate construction schedule/activities with holidays, etc. so as to not inconvenience residents unnecessarily over holiday weekends, etc.
- G. Failure to complete work in the specified contract period will be cause for enforcement of liquidated damages per GDPM requirements.
- H. Coordinate schedule / activities so as not to inconvenience the Owner unnecessarily.

1.6 PROJECT ALLOWANCES

- A. Building Systems Allowance: include **\$25,000 [twenty five thousand dollars]** in the base bid amount of the project for use as a project contingency allowance.
- B. Building Permit Allowance: include **\$5,000 [five thousand dollars]** in the base bid amount of the project for use in obtaining required building permits. All trade permits shall be included by the trade contractor. Unused funds shall be credited back to the Owner.
- C. Contingency funds shall only be used at the approval of RDA and Owner.
- D. Actual expenditures shall be tracked over the duration of the project with any unused funds deducted from the contract at the end of the project.
- E. All expenditures shall be identified and documented as they occur, not afterward. Work commenced without the approval of the Owner shall be at the Contractor's risk.

1.7 INSTRUCTIONS/RESPONSIBILITIES OF THE CONTRACTOR

- A. Protect all finishes and equipment scheduled to remain.

- B. Contractor shall commence and complete work as noted in the contract.
- C. Contractor shall furnish labor, materials, equipment, and management required to complete the project.
- D. Contractor shall furnish all required logistics required to accomplish the work – including lifts, scaffolding, ladders, trash chutes, safety equipment, etc.
 - 1. All Contractor staging areas and layout areas, etc. shall be coordinated and approved by the Owner prior to the start of the project.
 - 2. Provide protection of all existing pavement, turf, etc. from lifts, lulls, etc. which may be utilized on the project.
- E. Contractor shall visit the site to become thoroughly familiar with all working conditions, check and verify all dimensions, and site conditions. Any dimensions given or referred to in the specification or drawing is to be used purely as approximate and not as a basis for exact amounts for bidding. Contractor shall promptly advise the Architect of any discrepancies, errors with the specifications and drawings before bidding the work.
- F. Contractor to provide a valid Certificate of Insurance, follow all Workman's Compensation requirements and regulations, and conduct all work according to OSHA recognized safe work practices.
- G. All bonds, payment schedule, insurance shall be as noted in the contract documents.
- H. The plans and specifications are intended to depict the general scope, layout and quality of workmanship required, they are not intended to show or describe in detail every item necessary for the proper installation of the work.
- I. Special care shall be taken not to allow dust and debris to fall onto any equipment, material, personnel, or any room below the deck.
- J. The contractor shall provide Safety Data Sheets (SDS) on all products used.
 - 1. Submit directly to Owner. RDA does not review nor approve SDS.
- K. The term 'Architect' as referenced in these contract documents is RDA Group Architects.
- L. The term 'Owner' as referenced in this specification is Greater Dayton Premier Management.

1.8 WORK BY THE OWNER

- A. Not Applicable
- B. Contractor shall coordinate all aspects of Work by Owner as they interface with Work.

1.9 APPLICABLE REFERENCES, CODES, AND PERMITS

- A. References will be found in each section that applies to that section. In addition, Contractor shall comply with the Ohio Building Code requirements as they relate to the work.
- B. Contractor shall procure at his own expense all necessary permits from municipal or other agencies and give all notices required. Fines levied due to non-compliance shall be paid by the contractor.

1.10 WAGES

- A. Refer to Section 01 29 00.

1.11 TAXES

- A. Refer to Section 01 29 00.

1.12 SMOKING

- A. Smoking is not permitted on HUD property– inside or outside of any facility.

- B. Contractor or crewmembers found to be smoking on the jobsite will be subject to a \$500 fine per occurrence. Any habitual offenders will be dismissed from the project site.

1.13 CONTRACTOR / GENERAL REQUIREMENTS

- A. Visit the project sites to verify general and pertinent conditions and take measurements necessary for bidding purposes. Arrangements to visit the site may be made by contacting Kevin Arnold at GDPM.
- B. Pay for all building permits, trade permits, ROW permits, and any other required permits and inspections necessary to complete all work related to these specifications. Comply with Federal, State, and Local Codes. All work shall comply with HUD General Conditions of the Contract for Construction [HUD Form 5370]
- C. Taxes: Contractor shall pay all applicable taxes, including applicable sales and use taxes, and other taxes as required by governing law.
 - 1. GDPM is a tax-exempt entity.
 - 2. Tax Exempt forms shall be provided upon request.
- D. Contractor shall provide dumpsters or trash containers needed and shall not use GDPM dumpsters or trash containers at any time for removal of materials, trash, or debris related to the Contractor's work. Debris shall be removed from the site regularly and be placed within appropriate trash receptacles. All work areas shall be kept neat at all times. Trash shall not be permitted to be left around the site. All considerations must be taken for resident safety. No trash or debris shall be left on the ground.
 - 1. Run magnet around work areas daily to pickup stray nails, etc. when appropriate.
- E. Contractor is responsible for furnishing workers with potable drinking water and any/all sanitary requirements for the workers during the project. Use of GDPM facilities and property is prohibited.
- F. Contractor shall provide portable generator or required equipment as needed for the completion of the work. Contractor shall not use GDPM and/or resident electricity.
- G. A Contractor, working under a contractual agreement with **GDPM, MUST BE IN COMPLIANCE WITH OSHA STANDARDS 1926 – REGULATIONS FOR CONSTRUCTION**. Any and all sub-contractors, doing work on this project, **MUST ALSO BE IN COMPLIANCE WITH OSHA STANDARDS**. Non-compliance shall be a basis for making a bid non-responsive. And, if a Contractor or sub-contractor is found to be in **VIOLATION (NON-COMPLIANCE) AT ANY TIME**, this could be a basis for termination of the purchase order/contract. Comply with all Safe Work Practices.
- H. Failure to show or mention petty details shall not be warranted for the omission of anything necessary for the proper completion of the work.
- I. Contractor shall not take advantage of any clerical errors, omissions, contradictions, or conflicts that may develop in plans, specifications, or details. Such errors, ambiguities and discrepancies shall be reported to the Architect immediately for clarification, revision, or correction prior to the submission of bids. If no notification is given, it shall be assumed that all specifications and conditions will be met.
- J. Contract Period
 - 1. If an extension of time is necessary, a request in writing must be submitted to the Owner at least [14] days prior to the contract completion date.
 - 2. Notify the Architect, in writing, upon determination of any delay in material delivery.
- K. Security: Contractor's Liability for Vandalism
 - 1. Contractor shall be responsible at the Contractor's cost and expense, for the securing and protection of the project which is under the control of the Contractor, and for the repair and

replacement of the work until that portion of the work is accepted as completed by the Owner. The Contractor shall take the measures necessary to provide such security.

- L. Qualifying Contractors and Sub-Contractors: The Owner may require the contractor/sub-contractor to provide references of similar projects, past performance, financial disclosures, etc. in the interest of selection of the lowest and best bidder for the project.
 - 1. The Contractor is responsible for all work performed by Sub-Contractors.
 - 2. The Owner has the final authority to request a particular sub-contract not be engaged in the project. If this occurs, The Owner and Contractor shall determine if there is an impact to the Contract amount, and negotiate, if necessary, to an adjustment in the Contract amount.
 - a. No change to the Contract amount will be permitted if there is a change to the sub-contractor due to them utilizing alternate manufacturers or products that were not approved substitution requests.

1.14 CONTRACTOR QUALIFICATIONS

- A. The Contractor and/or Sub-contractors must establish their qualifications with GDPM for their ability to complete this type of work. Qualifications may be established by:
 - 1. Provide references of similar projects, past performance, financial disclosures, etc. in the interest of selection of the lowest and best bidder for the project.
 - 2. Providing a letter of approval for the installation of the products from the manufacturer.
 - a. Contractor must be properly trained and approved by the manufacturer for the installation of the products.
 - 3. Providing a recommendation from the supplier of the products.
 - 4. Demonstrating to GDPM the capability to do the work. The Contractor will have a minimum of five years documented experience in similar work.
- B. The Contractor will be responsible for all work performed by the Sub-contractors.

1.15 RESPONSIBILITIES OF THE CONTRACTOR

- A. Protect all finishes and equipment scheduled to remain.
- B. Contractor shall commence and complete work as noted in the contract.
- C. Contractor shall furnish labor, materials, equipment, and management required to complete the project.
- D. Contractor shall furnish all required logistics required to accomplish the work – including lifts, scaffolding, ladders, trash chutes, safety equipment, etc.
 - 1. All Contractor staging areas and layout areas, etc. shall be coordinated and approved by the Owner prior to the start of the project.
- E. Contractor shall visit the site to become thoroughly familiar with all working conditions, check and verify all dimensions, and site conditions. Any dimensions given or referred to in the specification or drawing is to be used purely as approximate and not as a basis for exact amounts for bidding. Contractor shall promptly advise the Architect of any discrepancies, errors with the specifications and drawings before bidding the work.
- F. Contractor to provide a valid Certificate of Insurance, follow all Workman's Compensation requirements and regulations, and conduct all work according to OSHA recognized safe work practices.
- G. All bonds, payment schedule, insurance shall be as noted in the contract documents.
- H. The plans and specifications are intended to depict the general scope, layout and quality of workmanship required, they are not intended to show or describe in detail every item necessary for the proper installation of the work, nor are the documents an instruction manual of how to accomplish the work.

- I. The contractor shall provide Safety Data Sheets [SDS] on all products used.
 - 1. Submit directly to Owner. RDA does not review nor approve SDS.

1.16 SPECIFICATION CONVENTIONS

- A. These specifications are written in imperative mood and streamlined form. This imperative language is directed to the Contractor, unless specifically noted otherwise. The words “shall be” are included by inference where a colon (:) is used within sentences or phrases.

1.17 APPLICATIONS FOR PAYMENT

- A. Refer to Section 01 29 00.

1.18 CHANGE PROCEDURES

- A. The Architect or Owner may issue a Proposal Request including a detailed description of proposed change with supplementary or revised Drawings and specifications, a change in Contract Time for executing the change. Contractor will prepare and submit estimate within 7 days.
- B. On Owner’s approval of a proposal from Contractor, Owner will issue a Change Order for all changes to Contract Sum and for all changes to the Contract Time.
- C. Stipulated Sum/Price Change Order: Based on Proposal Request and Contractor's fixed price quotation.
- D. Unit Price Change Order: For contract unit prices and quantities, the Change Order must be executed prior to beginning any work. The Order will be based on fixed unit price basis provided in the Bid Form.
- E. Construction Change Order: Architect may issue directive, on AIA / HUD Forms signed by Owner, instructing Contractor to proceed with changes in the Work. Document will describe changes in the Work, and designate method of determining any change in Contract Sum/Price or Contract Time. Promptly execute change.
- F. Change Order Forms: AIA / HUD Approved Forms with all required backup documentation.
- G. Correlation Of Contractor Submittals:
 - 1. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as separate line item and adjust Contract Sum/Price.
 - 2. Promptly revise progress schedules to reflect change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.
 - 3. Promptly enter changes in Project Record Documents.
- H. The Architect will advise of minor changes in the Work not involving adjustment to Contract Sum/Price or Contract Time by issuing supplemental instructions on Architect’s approved forms.
- I. Important: All change orders must be fully executed prior to beginning any work. Failure to comply will result in contractor request being denied and completed at no cost to the Owner.

1.19 UNIT PRICES

- A. Owner will take measurements and compute quantities accordingly. Provide and assist in taking of measurements.
- B. Unit Price Schedule:
 - 1. None
- C. Unit Price includes: Full compensation for required labor, products, tools, equipment, plant and facilities, transportation, services, and incidentals; erection, application or installation of item of the Work; overhead and profit.

- D. Final payment for Work governed by unit prices will be made on basis of actual measurements and quantities accepted by Architect multiplied by unit price for Work incorporated in or made necessary by the Work.

1.20 ALTERNATES

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option.
- B. Coordinate related Work and modify surrounding Work as required.
- C. Schedule of Alternates:
 - 1. None

1.21 COORDINATION

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

1.22 QUALITY CONTROL

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

1.23 TOLERANCES

- A. Monitor fabrication and installation tolerance control of installed Products over suppliers, manufacturers, Products, site conditions, and workmanship, to produce acceptable Work. Do not permit tolerances to accumulate.

- B. Comply fully with manufacturer's tolerances.

1.24 REFERENCES

- A. Conform to reference standards by date of issue current as of date of Contract Documents.
- B. When specified reference standard conflicts with Contract Documents, request clarification from Architect before proceeding.

1.25 LABELING

- A. Attach label from agency approved by authority having jurisdiction for products, assemblies, and systems required to be labeled by applicable code.
- B. Label Information: Include manufacturer's or fabricator's identification, approved agency identification, and the following information, as applicable, on each label.
 - 1. Model number.
 - 2. Serial number.
 - 3. Performance characteristics.

1.26 PRECONSTRUCTION MEETING

- A. Owner/RDA will schedule preconstruction meeting after Notice of Award for affected parties.
- B. Owner, RDA, Contractor Project Manager, and Foreman shall be in attendance.
- C. Agenda:
 - 1. Execution of Owner-Contractor Agreement.
 - 2. Submission of executed bonds and insurance certificates.
 - 3. Distribution of Contract Documents.
 - 4. Submission of list of Subcontractors, list of products, schedule of values, and progress schedule.
 - 5. Designation of personnel representing parties in Contract, and Architect.
 - 6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
 - 7. Scheduling.
 - 8. Use of premises by Owner and Contractor.
 - 9. GDPM requirements for procedures and inspections
 - 10. Construction facilities and controls provided by Owner.
 - 11. Security and housekeeping procedures.
 - 12. Application for payment procedures.
 - 13. Procedures for maintaining record documents.
 - 14. Requirements for start-up of equipment.
 - 15. Inspection and acceptance of equipment put into service during construction period.
- D. Architect will record minutes and distribute copies via email within two days after meeting to participants and those affected by decisions made.

1.27 PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the Work as applicable to the work at weekly intervals.
- B. Architect will make arrangements for meetings, prepare agenda with copies for participants, and preside at meetings.
- C. Attendance Required: Job superintendent, major subcontractors and suppliers, Architect, Owner, as appropriate to agenda topics for each meeting.
- D. Agenda:
 - 1. Review minutes of previous meetings.

2. Review of Work progress.
 3. Field observations, problems, and decisions.
 4. Identification of problems impeding planned progress.
 5. Review of submittals schedule and status of submittals.
 6. Review of off-site fabrication and delivery schedules.
 7. Maintenance of progress schedule.
 8. Corrective measures to regain projected schedules.
 9. Planned progress during succeeding work period.
 10. Coordination of projected progress.
 11. Maintenance of quality and work standards.
 12. Effect of proposed changes on progress schedule and coordination.
 13. Other business relating to Work.
- E. Architect shall record minutes and distribute copies via email within two days after meeting to participants and those affected by decisions made.

1.28 PRE-INSTALLATION MEETINGS

- A. Contractor shall determine any and all necessary pre-installation meetings and shall schedule the same.
- B. When required in individual Specification Sections, convene preinstallation meetings at Project Site one week before starting Work of specific Section.
- C. Require attendance of parties directly affecting, or affected by, Work of specific Section.
- D. Prepare agenda and preside over meeting:
- E. Review conditions of installation, preparation, and installation procedures.
- F. Review coordination with related Work.
- G. Record minutes and distribute to participants after meeting, and those affected by decisions made.

1.29 CONTRACT ADMINISTRATION

- A. RDA is providing contract administration services for this project to the Owner. However, it shall be the responsibility of the Contractor and Owner to coordinate the proposed work, schedules, installations, permits, inspections, etc. as RDA is not on-site every day.
- B. It is the Contractor's responsibility to contact the RDA for clarification should there be questions regarding the interpretation or intent of the documents, field discovery, etc. that would impact or affect the work as proposed. RDA shall not be liable for deviations, field changes, and Owner changes during construction.
- C. It is the Contractor's responsibility to field confirm all existing conditions, proposed installations and how they interface to ensure the systems can be installed per the intent of the documents and to meet applicable building and zoning codes, local requirements, Owner requirements, provide a watertight detail, meet aesthetic requirements, etc.
- D. It is the Contractor's responsibility to meet all applicable building and zoning codes requirements whether specifically noted herein or not. Building codes represent the minimum acceptable standard.
- E. It is the Contractor's responsibility to install all products, materials, installations, and the like in accordance with applicable industry standards, applicable manufacturer's details and instructions, in accordance with best practices, and building code provisions. The manufacturer details / requirements are the minimum acceptable standard, RDA drawings may require additional work.

1.30 CUTTING AND PATCHING

- A. Employ skilled and experienced installer to perform cutting and patching new Work; restore Work with new Products.
- B. Submit written request in advance of cutting or altering elements affecting:
 - 1. Structural integrity of element.
 - 2. Integrity of weather-exposed or moisture-resistant elements.
 - 3. Efficiency, maintenance, or safety of element.
 - 4. Visual qualities of sight exposed elements.
 - 5. Work of Owner or separate contractor.
- C. Execute cutting, fitting, and patching [including excavation and fill,] to complete Work, and to:
 - 1. Fit several parts together, to integrate with other Work.
 - 2. Uncover Work to install or correct ill-timed Work.
 - 3. Remove and replace defective and non-conforming Work.
 - 4. Remove samples of installed Work for testing.
 - 5. Provide openings in elements of Work for penetrations of mechanical and electrical Work.
- D. Execute work by methods to avoid damage to other Work, and to provide proper surfaces to receive patching and finishing.
- E. Cut masonry and concrete materials using masonry saw or core drill. Restore Work with new Products in accordance with requirements of Contract Documents.
- F. Fit Work tight to adjacent elements. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.
- G. Fit Work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- H. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.
- I. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated materials, to full thickness of penetrated element. Follow applicable UL assemblies.
- J. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for assembly, refinish entire unit. For painted surfaces, paint entire wall from corner to corner, floor to ceiling.
- K. Identify hazardous substances or conditions exposed during the Work to Architect for decision or remedy.

1.31 CONSTRUCTION PROGRESS SCHEDULES

- A. Utilize Microsoft Project Schedule or similar spreadsheet with separate line for each major section of Work or operation, identifying first work day of each week.**
- B. Illustrate order and interdependence of activities and sequence of work; how start of given activity depends on completion of preceding activities, and how completion of activity may restrain start of subsequent activities. Illustrate complete sequence of construction by activity, identifying work of separate buildings/units.
- C. Submit initial progress schedule in duplicate within three [3] days prior to the Preconstruction meeting for Architect/Owner review. Schedule will be reviewed and approved at the Preconstruction Meeting by all project team members.
- D. Submit revised schedules with each Application for Payment, identifying changes since previous version. Indicate estimated percentage of completion for each item of Work at each submission.

- E. Participate in joint review and evaluation of project schedule with Architect/Owner at each submittal.
- F. Evaluate project status to determine work behind schedule and work ahead of schedule. Indicate changes required to maintain Date of Substantial Completion.
- G. After review, revise project schedule incorporating results of review, and resubmit electronically to all parties within 3 days.

1.32 SUBMITTAL PROCEDURES

- A. Refer to Section 01 33 00.

1.33 MOCK-UPS

- A. Accomplish mockups as directed by the Owner / RDA.
- B. Accepted mock-ups are representative of quality required for the Work.
- C. Where mock-up has been accepted by Owner / RDA and is specified in product specification sections to be removed; remove mock-up and clear area when directed to do so.

1.34 TEMPORARY UTILITIES

- A. Refer to GDPM's Terms and Conditions
- B. Utilize existing utilities at the building as required to facilitate work. Maintain existing utilities operational throughout the duration of the project. If systems need to be out of service, schedule this work for off-hours, coordinate with Owner. DO NOT use Resident utilities.
- C. Provide temporary lighting for construction operations as required by conditions and where existing lighting has been removed to facilitate work.
- D. Provide temporary emergency egress and exit signage as required by conditions and where existing has been temporarily removed to facilitate work.
- E. Coordinate with fire sprinkler system and fire alarm system / monitoring company to maintain systems operational. This includes temporary protection and coordination of monitoring company to put system in test mode as applicable to the work.
 - 1. Provide and maintain a proper fire watch within the building at any time when systems are in test mode.

1.35 TEMPORARY HEATING / COOLING / VENTILATION

- A. Shut down HVAC systems during dusty activities. Provide and maintain filtration media at all HVAC systems.
- B. Ventilate enclosed areas to achieve curing of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- C. Provide temporary fan units as required to maintain clean air for construction operations.

1.36 TEMPORARY SANITARY FACILITIES

- A. Provide temporary sanitary facilities for use during construction. Maintain daily in clean and sanitary condition.
 - 1. Contractor may not use resident toilet facilities for temporary facilities.
- B. Provide potable drinking water for workers.

1.37 TEMPORARY BARRICADES

- A. Erect temporary barricades as applicable to the work to maintain security, dust control, etc.

- B. Temporary barricades during summer break when Contractor has full access to the construction area: polyethylene zip walls, etc. as required to maintain dust control and/or limit access.
- C. Provide all applicable signage to limit non-construction personnel from entering the construction area.

1.38 STAGING AREA / MATERIAL STORAGE

- A. Contractor shall assume no storage / staging space exists at the building. Any on-site storage must be accomplished by the Contractor.
- B. Contractor shall provide secured, portable storage containers as necessary for the proper execution of the work for the duration of the project. Coordinate location of storage containers with Owner. Protect / restore site as applicable to the conditions to original conditions.
- C. Exterior project staging area if provided shall be enclosed with a minimum of a 6' high chain link fence to the satisfaction of the Owner.

1.39 FIELD OFFICES AND SHEDS

- A. Provide securable on-site space for storage as required by the Contractor. Contractor shall coordinate with GDPM for approved location of such storage space.
- B. Provide field office for construction operations as deemed necessary by Contractor. Contractor shall pay for field offices and related expenses.

1.40 VEHICULAR ACCESS

- A. Utilize existing street parking / driveways / parking areas for construction activities. Contractor shall not block or prohibit vehicular access to adjacent buildings / parking areas. Do not allow driving/parking in turf areas.
- B. Provide unimpeded access for emergency vehicles. Maintain 20 feet wide driveways with turning space between and around combustible materials.
- C. Provide and maintain access to fire hydrants and control valves free of obstructions.

1.41 PARKING

- A. Use of designated existing on-site driveways / street parking used for construction traffic is permitted. Tracked vehicles not allowed on paved areas. Do not block resident vehicles or those of adjacent buildings with a shared driveway.
- B. Use of designated areas of existing parking facilities used by construction personnel is permitted.
- C. Do not allow heavy vehicles or construction equipment in parking areas.
- D. Maintenance:
 - 1. Maintain traffic and parking areas in sound condition free of excavated material, construction equipment, products, mud, snow, and ice.
 - 2. Maintain existing and permanent paved areas used for construction; promptly repair breaks, potholes, low areas, standing water, and other deficiencies, to maintain paving and drainage in original, or specified, condition.
- E. Removal, Repair:
 - 1. Repair existing and permanent facilities damaged by use, to original or specified condition.

1.42 PROGRESS CLEANING AND WASTE REMOVAL

- A. Collect and maintain areas free of waste materials, debris, and rubbish. Maintain site in clean and orderly condition to the satisfaction of the Owner. Clean up shall occur on a daily basis.

- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing spaces.
- C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- D. Failure to provide routine and daily cleanup may result in a back charge from the Owner to accomplish this work.
- E. Provide dumpsters or trash containers needed for the proper removal of project materials, trash, or debris related to the Work. Keep all work areas and project sites neat and free of trash and clutter at all times. Take all considerations for safety.

1.43 FIRE PREVENTION FACILITIES

- A. Establish fire watch for cutting and welding and other hazardous operations capable of starting fires. Maintain fire watch before, during, and after hazardous operations until threat of fire does not exist.
- B. Portable Fire Extinguishers: NFPA 10; 10 pound capacity, 4A-60B: C UL rating.
 - 1. Provide one fire extinguisher at each project site during work operations.
 - 2. Supplement as necessary per the local fire department requirements for construction operations.

1.44 PROTECTION OF INSTALLED WORK

- A. Protect installed Work and provide special protection where specified in individual specification sections.
- B. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- C. Protect finished pavement, concrete, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- D. Prohibit traffic or storage upon waterproofed or roofed surfaces, finished surfaces, etc as is applicable to the work. When traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer and provide all required protection as determined necessary. Any damage caused shall be repaired to like new condition.
- E. Prohibit traffic from landscaped areas.

1.45 SECURITY

- A. Security Program:
 - 1. Protect Work and existing premises from theft, vandalism, and unauthorized entry.
 - 2. Maintain program throughout construction period until Owner occupancy
- B. Entry Control:
 - 1. Restrict entrance of persons into Project site.
 - 2. Allow entrance only to authorized persons with proper identification.
 - 3. Maintain log of workers and visitors, make available to Owner on request.

1.46 DUST CONTROL

- A. Execute work by methods to minimize raising dust from Construction operations.
- B. Provide positive means to prevent air-borne dust from dispensing into atmosphere and to other areas of the project as applicable.
- C. Provide temporary visqueen dust control measures to minimize the spread of dust and debris. Provide drop cloths, protective coverings as necessary.

- D. Provide protection of existing HVAC / distribution systems.

1.47 DELIVERY, HANDLING, STORAGE, AND PROTECTION

- A. Deliver, handle, store, and protect Products in accordance with manufacturer's instructions.
- B. Contractor shall be responsible for storage and safekeeping of all materials, including company's personal property. All damaged materials shall be removed from the site.
- C. Coordinate material delivery to avoid Owner involvement.

1.48 FINAL CLEANING

- A. Execute final cleaning on an area by area basis at completion of work in each unit prior to final project assessment / punch list inspection.
 - 1. Clean interior and exterior surfaces exposed to view.
 - 2. Remove manufacturer or temporary labels, stains, and foreign substances from surfaces.
 - 3. Polish transparent and glossy surfaces.
 - 4. Vacuum carpeted and soft surfaces.
 - 5. Clean interiors of all cabinetry.
 - 6. Clean all fixtures and finishes.
 - 7. Replace filters of operating equipment.
 - 8. Clean equipment and fixtures to sanitary condition with cleaning materials appropriate to surface and material being cleaned.
 - 9. Clean site; sweep paved areas, rake clean landscaped surfaces.
 - 10. Remove waste and surplus materials, rubbish, and construction facilities from site.
- B. Restore all work staging and lay-out areas to pre-construction conditions, including but not limited to, removal of debris, temporary facilities, grading and grass seeding and cleaning or repair of impacted structures.

1.49 STARTING OF SYSTEMS

- A. Coordinate schedule for start-up of various equipment and systems.
- B. Notify RDA and GDPM seven [7] days prior to start-up of each item.
- C. Verify each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions which may cause damage.
- D. Verify tests, meter readings, and specified electrical characteristics agree with those required by equipment or system manufacturer.
- E. Verify wiring and support components for equipment are complete and tested.
- F. Execute start-up under supervision of applicable Contractor's personnel in accordance with manufacturer's instructions.

1.50 DEMONSTRATION AND INSTRUCTIONS

- A. Demonstrate operation and maintenance of Products to Owner's personnel two weeks prior to date of Substantial Completion.
- B. For equipment or systems requiring seasonal operation, perform demonstration for other season within six months.
- C. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at scheduled times, at equipment location.
- D. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with Owner's personnel in detail to explain all aspects of operation and maintenance.

1. Prepare and insert additional data into the operations and maintenance manuals when the need for additional data becomes apparent during instruction.

1.51 TESTING, ADJUSTING, AND BALANCING

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

1.52 PROTECTING INSTALLED CONSTRUCTION

- A. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- B. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- C. Prohibit traffic or storage upon waterproofed or roofed surfaces. When traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- D. Prohibit traffic from landscaped areas.

1.53 POLLUTION AND ENVIRONMENTAL CONTROL

- A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations.
- B. Provide dust control, erosion and sediment control, etc. to allow for proper execution of the Work.
- C. Provide protective coverings, etc. as necessary to protect work.

1.54 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove existing utilities, connections, finishes, etc. as applicable to the work. Remove back to the nearest termination, junction box, etc. as applicable to the work. Coordinate with requirements on the drawings.
- B. Remove temporary utilities, equipment, facilities, materials, prior to Substantial Completion review.
- C. Clean and repair damage caused by installation or use of temporary work.
- D. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

1.55 CLOSE OUT PROCEDURES

- A. Refer to Section 01 77 00

1.56 PROJECT RECORD DOCUMENTS

- A. Refer to Section 01 77 00

1.57 OPERATION AND MAINTENANCE DATA

- A. Refer to Section 01 77 00.

1.58 WARRANTIES

- A. Refer to Section 01 77 00.

PART 2 PRODUCTS

2.1 GENERAL REQUIREMENTS

- A. Contractor shall follow all applicable requirements of the Owner's Terms and Conditions. If there should be a conflict between the Owner Requirements and those herein, the higher standard shall apply.**
- B. Required Inspections by GDPM
 1. Contact GDPM Project Manager to:
 - a. Inform GDPM when the job is actually going to start to allow resident notification.
 - b. Mockup inspections.
 - c. Inspection at random or when problems / field conditions arise.
 - d. Final Inspection.
 - e. Punchlist requirements.
 - f. Acceptance of the project by GDPM.

2.2 MANUFACTURED PRODUCTS

- A. Where a particular system, product, or material is specified by name it shall be considered a standard and most satisfactory for its particular purpose. Any other product or material considered equal or better in all respects must be approved by the Architect prior to bidding.
- B. All products used on this project shall be new, unless otherwise noted on the drawings or as specified herein.

2.3 PRODUCTS

- A. Products: Means new material, machinery, components, equipment, fixtures, and systems forming the Work, but does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components specifically identified for reuse.
- B. Do not use materials and equipment removed from existing premises, except as specifically identified or allowed by the Contract Documents.
- C. Provide interchangeable components of same manufacturer for components being replaced.
- D. Furnish products of qualified manufacturers suitable for intended use. Furnish products of each type by single manufacturer unless specified otherwise.
- E. **Products shall be ordered in the first 30 days of the contract. Provide documentation of orders upon request.**
- F. **It shall be solely the Contractor's responsibility to order products to allow timely delivery for installation. The failure to order materials early in the project shall not be a reason for a contract time extension or additional costs related to expedited shipping and/or delivery. Nor shall this be a reason for a product substitution.**

2.4 LABELING

- A. Attach label from agency approved by Authority having Jurisdiction for products, assemblies, and systems required to be labeled by Applicable Code.
- B. Label information: include manufacturer's or fabricator's identification, approved agency information, and the following information, as applicable, on each label.
 1. Model number
 2. Serial number
 3. Performance characteristics

2.5 DELIVERY, HANDLING, STORAGE, AND PROTECTION

- A. Deliver, handle, store, and protect Products in accordance with manufacturer's instructions.
- B. Contractor shall be responsible for storage and safekeeping of all materials, including company's personal property. All damaged materials shall be removed from the site.
- C. Coordinate material delivery to avoid Owner involvement.
- D. Locations of ground level storage and waste dumpster must be approved by the Owner.
- E. All materials shall be properly secured to prevent blow off during weather, wind, etc.

2.6 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Any Product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Products of manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with Provision for Substitutions: Submit request for substitution for manufacturers not named.

2.7 SUBSTITUTIONS

- A. Refer to Section 01 25 00.

2.8 EXTRA MATERIALS

- A. Provide attic stock of finish materials totaling 5% [or as noted herein] of the total installation.
- B. Provide minimum of [1] gallon of each finish paint color.
- C. Coordinate turnover of extra materials to Owner, assist in placing materials in a location suitable to the Owner.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify existing site conditions and substrate surfaces are acceptable for subsequent Work. **Beginning new Work means acceptance of existing/job-site conditions.**
- B. Verify utility services are available, of correct characteristics, and in correct location.
- C. Contact OUPS a minimum of 48 hours prior to beginning work to verify location of existing utilities, coordinate requirements as applicable.
 - 1. Contact private utility locating services as required by the conditions. It is the Contractor's responsibility to locate all public and private utilities that may be impacted by the work.

3.2 FIELD VERIFICATION

- A. Prior to ordering materials, Contractor shall verify the actual dimensions of existing conditions and assume responsibility for workable solutions for all new work. Verification that the new work and items are workable for existing conditions while providing adequate clearances is the responsibility of the Contractor.

3.3 PROTECTION

- A. The work shall be accomplished in accordance with the provision of Federal, State American Standard Safety Code for Building Construction and OSHA safety requirements.
 - 1. Contractor shall be responsible for protective railings and guards, tie-offs, fall protection, and other safety measures as required by OSHA, even if not specified. Fall protection is

required. RDA is not a safety consultant and as such does not direct the means and methods of compliance with safety regulations.

- B. The Contractor shall protect and maintain all building entrances, interior contents, building exterior and grounds.
 - 1. Return all surfaces to their original condition after all work is complete.
- C. In the event of damages of any kind caused by improper protection. The Contractor shall replace/repair the damages [including interior or exterior equipment] at no expense to the Owner.
- D. Contractor shall comply with all regulations of the Local Fire Department and the Owner's requirement regarding storage and handling of flammable materials, etc. It is the responsibility of the Contractor performing any hot /torch work to comply with the safety provisions of the National Fire Codes pertaining to such work and the contractor shall be responsible for all damage or fines resulting from failure to so comply.

3.4 PREPARATION

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

3.5 DEFECT ASSESSMENT

- A. Replace the Work, or portions of the Work, not conforming to specified requirements.
- B. If, in the opinion of the Architect/Owner, it is not practical to remove and replace the Work, the Architect/Owner will direct appropriate remedy.
- C. Authority of Architect/Owner to assess defects and identify payment adjustments is final.
- D. Non-Payment For Rejected Products: Payment will not be made for rejected products.

3.6 JOB SUPERINTENDENT/EMPLOYEES

- A. Each prime contractor shall have a qualified foreman on the project at all times when work is being accomplished. [ALL Shifts]
- B. Employees shall refrain from fraternization with building occupants.
- C. The Contractor shall furnish the Owner with a list of personnel with phone numbers that will be working on the project and emergency contacts names and numbers that has the authority to handle emergencies on a 24 hour/seven days a week.

3.7 SAFETY PROGRAM

- A. Contractor must have a written safety program for all operations/ work performed on this project. The documents must be at the job site and be made available to the Owner or RDA when requested.
- B. The Contractor assumes all responsibility for project safety, ways, and means and methods of constructing the project.
- C. In addition, the Owner may require special safety requirements to be performed by the Contractor, these requirements will be provided prior to commencement of work.

3.8 DAILY JOB LOGS

- A. Maintain a daily job log that indicates the personnel on-site and activities performed (including all sub-contractors)
- B. Indicate any safety concerns and incidents.

- C. Indicate weather conditions.
- D. Indicate any visitors or other personnel visiting the project site.
- E. Job log shall be accessible to GDPM and Architect upon request.
 - 1. Email GDPM with daily reports upon request.

3.9 REMOVALS AND CLEANUP

- A. Contractor shall be responsible for the removal, dismantling of items that are required for proper completion of the work as applicable in each section. All debris resulting from the work not designated for reuse becomes the property of the contractor unless stated otherwise.
- B. At the completion of each day, the Contractor shall maintain the work area clean of all debris to the satisfactory of the Owner, including all the subcontractors work area.
- C. Provide dumpsters or trash containers needed for the proper removal of project materials, trash, or debris related to the work. Keep all work areas and project sites neat and free of trash and clutter at all times.
 - 1. No Debris, materials, etc. may be left unprotected on the grounds.
 - 2. All exterior staging / dumpster areas shall be fenced / protected.

3.10 SPECIAL PROCEDURES

- A. Materials: As specified in product sections; match existing with new products for patching and extending work.
- B. Employ skilled and experienced installer to perform alteration work.
- C. Cut, move, or remove items as necessary for access to alterations and renovation Work. Replace and restore at completion.
- D. Remove unsuitable material not marked for salvage, including rotted wood, corroded metals, and deteriorated masonry and concrete. Replace materials as specified for finished Work.
- E. Remove debris and abandoned items from area and from concealed spaces.
- F. Prepare surface and remove surface finishes to permit installation of new work and finishes.
- G. Remove, cut, and patch Work in manner to minimize damage and to permit restoring products and finishes to original or specified condition.
- H. Refinish existing visible surfaces to remain in renovated rooms and spaces, to renewed condition for each material, with neat transition to adjacent finishes.
- I. Where new Work abuts or aligns with existing, provide smooth and even transition. Patch Work to match existing adjacent Work in texture and appearance.
- J. When finished surfaces are cut so that smooth transition with new Work is not possible, terminate existing surface along straight line at natural line of division and submit recommendation to Architect for review.
- K. Patch or replace portions of existing surfaces which are damaged, lifted, discolored, or showing other imperfections.
- L. Finish surfaces as specified in individual product sections.

3.11 GENERAL PROJECT REQUIREMENTS

- A. Equipment delivery and equipment staging must be coordinated with Owner prior to start of project. The Contract shall anticipate no on-site storage being provided by Owner.

- B. Safety is paramount and all personnel on site must wear appropriate personal protection equipment [PPE]. The Contractor is responsible for means and methods to ensure that proper PPE is provided. Failure to comply may result in dismissal from site.
- C. Barricade work area with appropriate construction grade barriers to establish boundaries of work area and assure safety for all workers and general public. All work areas must be properly barricaded from the general public prior to starting any work.
- D. Job sites will be maintained in an orderly and neat fashion at all times.
- E. **IMPORTANT: Failure to show or mention petty details shall not be warranted for the omission of anything necessary for the proper completion of the work.**
- F. **The plans and specifications are intended to depict the general scope, layout and quality of workmanship required. The documents are not an “instruction manual” to execute the work nor are they intended to show or describe in detail every item necessary for the proper installation of the work. The means and methods required to execute the work described is the sole responsibility of the Contractor. The Contractor shall include the ancillary work required, whether explicitly stated or not, for the proper completion of the work as intended. The Contractor is required to meet or exceed building code requirements, applicable industry standards, ASTM standards, and/or manufacturer installation requirements as they relate to the work.**
- G. **The plans and specifications represent a single complete design package indicating the intended scope of the project in its entirety. As such, the project is structured to be awarded to a single Prime Contractor. The documents do not delineate bid packages or assign responsibilities to any subsequent subcontractors, dictate construction sequencing, nor provide coordination between any “trades”. Such activities are the responsibility of the holder of the construction contract. In the event of a discrepancy within the drawings or between the drawings and the specifications, the more stringent requirement represented in the documents shall prevail.**
- H. Contractor shall not take advantage of any clerical errors, omissions, contradictions, or conflicts that may develop in plans, specifications, or details. Such errors, ambiguities and discrepancies shall be reported to the Architect immediately for clarification, revision, or correction prior to the submission of bids. If no notification is given, it shall be assumed that all specifications and conditions will be met.
- I. Submission of a bid shall be considered the Contractor’s Certification that the bid is based upon equipment and/or materials that meet or exceed the standards set forth by specification or equipment and/or materials identification. Should a Contractor’s product be determined not equal to that specified, the Contractor shall be required to provide and install a product acceptable as equal by the Architect at no additional cost to the Owner.
- J. The submission of a bid shall indicate that the Contractor has visited the project site and is familiar with the conditions as they exist, and the modifications that may be necessary to provide a complete and professional finished project.
- K. There is a strict **NO SMOKING** policy for all work. Any worker found smoking on the jobsite will be subject to removal from the project. No exceptions. Habitual offenders may be subject to a fine in the amount of \$500 per occurrence.
- L. Security: Contractor’s Liability for Vandalism
 - 1. Contractor shall be responsible at the Contractor’s cost and expense, for the securing and protection of the project which is under the control of the Contractor, and for the repair and replacement of the work until that portion of the work is accepted as completed by the Owner. The Contractor shall take the measures necessary to provide such security.

2. Contractor shall be liable for and shall promptly repair or otherwise remedy any and all damages to said portion of the project and of the accepted construction work caused by vandalism up to \$5,000.00 per incident. Contractor shall indemnify and hold the Owner harmless from and against all damages, liabilities, costs and expenses, including, without limitation, reasonable attorney fees, which may be imposed upon or incurred by the Owner as a result of the Contractor's failure to comply with the requirements of this section.
- M. Insurance: **Refer to GDPM Terms and Conditions.**
1. Contractor to provide copy of Certificate of Insurance to GDPM.
 2. Contractor to submit evidence of Worker's Compensation insurance coverage and builder's risk insurance.
- N. Damages: Any and all damages to Housing Authority Property or resident property shall be repaired equivalent to the existing by the Contractor at no cost to the Authority. NO EXCEPTIONS.
- O. Safety: The work will be accomplished within a high traffic area and the Contractor is responsible for taking all safety precautions necessary or directed to ensure public safety.
1. RDA nor GDPM are safety consultants. Any and all safety provisions shall be managed and coordinated by the Contractor.
- P. Provide appropriate notification of Residents prior to starting work.

END OF SECTION

SECTION 01 25 00 – SUBSTITUTION PROCEDURES

PART 1 GENERAL

1.1 WORK INCLUDES

- A. Includes administration and procedural requirement for Substitutions.
 - 1. Substitutions' for Cause: Changes due to project conditions, such as unavailable of product.
 - 2. Substitutions' for Convenience: Changes that may offer advantages to the Owner.

1.2 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Any Product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Products of manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with Provision for Substitutions / Approved Equal: Submit request for substitution as outlined in this section for manufacturers not named.
 - 1. RDA/Owner is the decision maker if the proposed "approved equal" is in fact equal and approved. Any decision rendered is final.
 - 2. Any Contractor, Sub-contractor, or Supplier who makes their own judgement as to "approved equal" and includes within their bid without a formal approval is doing so at their own risk.

1.3 SUBSTITUTIONS PROCEDURES

- A. RDA will consider requests for Substitutions by the Bidder only [not materials suppliers, etc].
- B. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- C. A request constitutes a representation that the Bidder:
 - 1. Has investigated proposed product and determined that it meets or exceeds quality level of specified product.
 - 2. Will provide same warranty for Substitution as for specified product.
 - 3. Will coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost to Owner.
 - 4. Waives claims for additional costs or time extension which may subsequently become apparent.
- D. Substitution Procedure
 - 1. **Submit copy of request for Substitution for consideration to RDA no later than 7 days before bid opening date.**
 - 2. Submit shop drawings, product data, and applicable certified test results attesting to proposed product equivalence. Burden on proof is on proposer.
 - 3. RDA will notify Contractor in writing of decision to accept or reject request within 5 days of receipt of request or request additional information or documentation for evaluation.
- E. Substitutions will not be considered when they are indicated or implied on Submittals, without written request or when acceptance will require revision to the Contract Documents.
- F. If the Substitution will require modifications to the Contract / Bidding Documents, the cost for updating the documents shall be paid by the Contractor making the request.
- G. Substitutions will not be considered after award of the project without justification.
- H. Approved substitutions will be identified by Addenda.
 - 1. Bidders shall not rely upon approvals made in any other manner.

*Fire Alarm System Replacement
Grand Hi-Rise
Greater Dayton Premier Management*

END OF SECTION

SECTION 01 29 00 – PAYMENT PROCEDURES

PART 1 GENERAL

1.1 WORK INCLUDES

- A. Includes administration and procedural requirement for necessary to prepare and process Application for Payment.

1.2 SCHEDULE OF VALUES

- A. Submit schedule on AIA Form G703 or other approved HUD forms.
 - 1. Provide line items for each applicable CSI division / defined work scope such that the Owner and RDA can review and determine/confirm progress.
 - 2. Include line items for each allowance, alternates [as applicable], and general conditions.
- B. Submit Schedule of Values in duplicate three days prior to the Pre-Construction meeting for approval by Architect and Owner.
- C. Approved Schedule of Values will be signed at the Pre-Construction meeting.
- D. Format: Utilize Table of Contents of this Project Manual. Identify each line item with number and title of major specification Section. Identify site mobilization/general conditions, bonds and insurance.
 - 1. Schedule of values should be broken down by building and also by division / work scope for each building.
- E. Revise schedule to list approved Change Orders, with each Application for Payment.

1.3 APPLICATIONS FOR PAYMENT

- A. Use AIA form G702 and G703 [or other approved HUD forms] for Application for payment as required by Owner.
- B. Content and Format: Utilize Schedule of Values for listing items in Application for Payment.
- C. Complete every entry, notarize and execute by a person authorized to sign document on behalf of the contractor. Include amounts for work completed following previous Application for Payment whether or not payment has been received, include amounts of Change Orders issued before last day of construction period covered by application.
 - 1. Stored materials included in application must have supporting documentation that verifies amount required, do not include overhead and profit on stored material.
 - 2. Submit to RDA for review and processing.
 - a. E-mail submittal is acceptable unless otherwise directed by the Owner. Verify hard copies with Owner if required.
- D. Each application for payment following the initial Application for Payments shall be consistent for payment with previous applications.
- E. Payment Period: Monthly. First pay application at 30 days into contract period.
- F. Submit updated construction schedule with each Application for Payment as applicable to the work. Failure to submit the updated construction schedule can delay the processing of the Application for Payment.
- G. Submit all required waivers of lien/partial release of lien, payroll reports as required by GDPM, etc. Failure to submit required paperwork can delay the processing of the Application for Payment

1.4 RETAINAGE

- A. Refer to GDPM Terms and Conditions.

1.5 PREVAILING WAGE / PAYROLL REPORTS

- A. The work of this project is subject to Davis-Bacon Prevailing Wages.
- B. Include in the bid amount all applicable prevailing wages.
- C. Provide payroll reports indicating compliance to the Owner on a monthly basis.
 - 1. Pay Applications will not be processed without approved payroll reports submitted to the Owner.

1.6 TAXES

- A. GDPM is tax exempt. Tax Exempt Certificates will be provided upon request.
- B. GDPM will not compensate the Contractor for any taxes paid on the project.

1.7 SUBMITTAL PROCEDURES

- A. Submit [1] copy of each payment application on AIA Form G702 and G703, in PDF format
 - 1. Pencil copy to RDA for review/acceptance. RDA will review and provide any comments or questions.
 - 2. Submit final payment application in PDF format to RDA for processing.
 - 3. RDA will certify and process the payment application and will forward to Owner for payment.
- B. Submit all required waivers of lien / partial release of lien [including vendors and subcontractors as requested by Owner], payroll reports, etc. as required by the Owner. Failure to submit required paperwork can delay processing of Application for Payment.

1.8 FINAL APPLICATION FOR PAYMENT

- A. Refer to provisions in Section 01 77 00 for Application for Payment at Substantial Completion.

END OF SECTION

SECTION 01 33 00 – SUBMITTALS

PART 1 GENERAL

1.1 WORK INCLUDES

- A. Review of shop drawings and product data by RDA / Owner.

1.2 SUBMITTAL PROCEDURES

- A. Contractor to submit product data and shop drawings for all applicable components of the project. Refer to individual sections for additional requirements.
 - 1. Contractor to provide a submittal log at the beginning of the project for review by RDA / Owner. Submittal log shall identify proposed submittals by Spec Section.
 - 2. RDA review of the submittals will be general in nature and does not relieve the Contractor in any way of the responsibility in compliance with the contract requirements, manufacturer requirements, and/or applicable codes.
- B. Submittals shall be accomplished in a digital [PDF format].
 - 1. Any hard copies received will be scanned and returned electronically.
 - 2. Provide those submittals required to maintain orderly progress of the work and those required for early lead time for manufacturer fabrication.
 - 3. Mark each component to identify applicable products, models, options, and other data. Supplement manufacturer's standard data to provide information unique to this project. Non-identified submittals will be rejected.
- C. Submittals shall have a Submittal form / cover sheet to identify Project, Contractor, subcontractor or supplier; and pertinent Contract Document references.
- D. Apply Contractor's stamp, signed or initialed, certifying that review, verification of Products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with requirements of the Work and Contract Documents.
- E. Identify variations from Contract Documents and Product or system limitations which may be detrimental to successful performance of completed Work.
- F. Revise and resubmit submittals as required; identify changes made since previous submittal.
- G. All submittals shall be accomplished at the beginning of the project to allow the proper ordering of materials for the project.
 - 1. Failure by the Contractor to provide submittals in a timely fashion does not change the project start date nor contract period.
- H. Any materials on the job site that have not been reviewed as part of the submittal process are subject to rejection / removal from the job-site. Any work undertaken without review of the submittal data is at the Contractor's risk and subject to rejection or replacement at no cost to the Owner if submittals are not in conformance with the project documents.
- I. Schedule submittals to expedite Project, and deliver to Owner. Coordinate submission of related items.
- J. For each submittal for review, allow seven [7] days excluding delivery time to and from Contractor.
- K. Allow space on submittals for Contractor and Architect review stamps.
- L. When revised for resubmission, identify changes made since previous submission.
- M. Distribute copies of reviewed submittals as appropriate (electronically as appropriate). Instruct parties to promptly report inability to comply with requirements.
- N. All submittals shall be completed within the first 30 days of the project.

1.3 SUBMITTALS / PRODUCT DATA / SHOP DRAWINGS

- A. Product Data/Shop Drawings:
 - 1. Submitted to RDA for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.
 - 2. All shop drawings shall be to scale, submit drawings on sheets no larger than 24-inch x 36 inch, all other product data can be on 8 ½ X 11-inch sheets.
- B. Samples for Review:
 - 1. Submitted to RDA for review and selection for aesthetic, color, or finish.
 - 2. Submit samples of finishes from full range of manufacturer's standard colors, textures, and patterns for Owners selection.
 - 3. Submit samples to illustrate functional and aesthetic characteristics of Product.
- C. Personnel/Other Contractors
 - 1. Submit a list of all subcontractors and on-site personnel with the list of lead contact and associated phone numbers.
 - 2. Submit emergency contact sheet with contacts for an emergency – 24/7 call list.
- D. Contract Items:
 - 1. Submit Certificate of Insurance, Worker's Comp Certificates as required by Owner.
 - 2. Submit bonds if applicable to the contract.
 - 3. Submit a written Construction Schedule / Implementation and Sequencing Plan outlining starting points and length of time to complete work in each section.
- E. Safety Data Sheets: Submit Safety Data Sheets [SDS] on all products to the Owner.
 - 1. Owner shall be responsible to provide to employees as applicable.
 - 2. Owner's representative /RDA does not review / approve any SDS sheets.
- F. Site Specific Safety Plan
 - 1. Provide to Owner for their Review.
- G. Site Logistics Plan
 - 1. Provide to Owner for their Review.

1.4 SAMPLES

- A. Physical Samples: Submit to Architect for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.
 - 1. Physical samples are required to allow Architect to make selections for color and finish. Electronic images of colors/finishes, etc. are not sufficient.
- B. Samples For Selection as Specified in Product Sections:
 - 1. Submit to Architect for aesthetic, color, or finish selection.
 - 2. Submit samples of finishes from full range of manufacturers' standard colors, textures, and patterns for Architect selection.
- C. Submit samples to illustrate functional and aesthetic characteristics of Products, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
- D. Include identification on each sample, with full Project information.
- E. Submit 2 copies of each sample, Architect will retain 1 copy.
- F. Reviewed samples which may be used in the Work are indicated in individual specification sections.

1.5 PROPOSED PRODUCTS LIST

- A. Within 5 days after date of Notice to Proceed, submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.

- B. All products for the project shall be ordered in the first 30 days of the contract. Contractors' failure to order materials is not a reason for a time extension or selection of an alternate material. This is imperative to allow work as scheduled.
- C. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.

1.6 MANUFACTURER'S INSTRUCTIONS

- A. When specified in individual specification sections, submit manufacturer printed instructions for delivery, storage, assembly, installation, [start-up,] adjusting, and finishing, in quantities specified for Product Data.

1.7 MANUFACTURER'S CERTIFICATES

- A. When specified in individual specification sections, submit certifications by manufacturer to Owner, in quantities specified for Product Data.
- B. Indicate material or Product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

1.8 CONSTRUCTION PHOTOGRAPHS

- A. Provide digital photographs of construction throughout progress of Work as taken by project superintendent as applicable to document the existing conditions, work in progress, completed work, project wrap up, etc. It is in the best interest of the contractor to document the conditions as this is an occupied unit project.
- B. Deliver photographs to Architect/Owner upon request on CD. Catalog and index in chronological sequence with date indexed.

END OF SECTION

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SECTION 01 40 00 - QUALITY REQUIREMENTS/PROJECT INSPECTION

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Quality control and control of installation.
- B. GDPM Construction Inspection Procedures
- C. Tolerances
- D. References.
- E. Mock-up requirements.
- F. Examination & Inspection.

1.2 QUALITY CONTROL AND CONTROL OF INSTALLATION

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

1.3 GDPM CONSTRUCTION INSPECTION PROCEDURES

- A. GDPM Staff have clear goals with regard to the importance of thorough construction inspection that ensures compliance with the bid documents. The compliance documents shall include the project specifications, drawings, contract, notice to proceed, codes, regulations and ordinances.
- B. GDPM intends for a GDPM Staff (Project Manager) and an A/E representative to routinely monitor the Contractor's work and progress on all projects. Quality control is an important element which is the responsibility of the Contractor. The Contractor shall provide full cooperation with all inspection steps through the construction process and include such coordination in the base bid of the project.
- C. Accessibility to the work shall be arranged by the Contractor. The necessary ladders, scaffolding, hoisting, etc shall be provided by the Contractor in order to make all areas of the work available to the construction inspector and consultant. The contractor shall have his authorized representative (superintendent) available to interface with and assist with the inspection process.
- D. Acceptance of Conditions:
 - 1. The construction inspector and consultant shall not allow work to proceed when there is a construction deficiency document in place that has not been cleared.

2. The construction inspector and consultant shall not allow work to proceed that requires mock-ups until such mock up is acceptable. Subsequent work in like kind shall be equal to or better than the mock-up.
- E. Prior to final completion, the contractor is to be required to inspect all of his work. He shall correct any deficiencies and enter a document that all of the contracted for work has been completed within the scope of the contract and request "final inspection" by the GDPM representative.**
- F. The final inspection shall result in either complete acceptance or generation of a punch list that is to be corrected in a timely manner and back punched by GDPM and the consultant.
- G. After review by GDPM Project Manager, GDPM will review project acceptance with site and senior staff for final acceptance of the project. This review may prompt additional punchlist work that may need to be completed.**
- H. If work that is clearly not complete, the Punchlist will be suspended until such time that it is evident that the Contractor has completed and reviewed/inspected their own work.**
- I. The final inspection acceptance shall include approval and sign-off by the construction inspector, construction coordinator and consultant. Sign off approvals
- J. The warranty blanketing the contract will not be allowed to commence until all work under the contract is completed and accepted for beneficial use by GDPM.
 1. This will be accomplished on a building by building basis.
- K. An anniversary inspection for the one year interval following acceptance of the project shall be performed and documented by the construction coordinator and consultant.

1.4 TOLERANCES

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

1.5 REFERENCES

- A. For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard by date of issue current on date of Contract Documents, except where specific date is established by code.
- C. Obtain copies of standards where required by product specification sections.
- D. When specified reference standards conflict with Contract Documents, request clarification from Architect before proceeding.
- E. Neither contractual relationships, duties, nor responsibilities of parties in Contract nor those of Architect shall be altered from Contract Documents by mention or inference otherwise in reference documents.

1.6 MOCK-UP REQUIREMENTS

- A. Assemble and erect specified items with specified attachment and anchorage devices, flashings, seals, and finishes.

- B. Accepted mock-ups shall be comparison standard for remaining Work follow requirements of individual sections.
- C. Provide mockups of the work as directed / required by the Architect / GDPM.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.
- B. Verify existing substrate is capable of structural support or attachment of new Work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Verify utility services are available, of correct characteristics, and in correct locations.

3.2 PREPARATION

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

END OF SECTION

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SECTION 01 77 00 - CLOSEOUT REQUIREMENTS

PART 1 GENERAL

1.1 WORK INCLUDES

- A. Close-out of the actual work, including warranties, maintenance manuals and final cleaning. Close-out of all contract obligations.

1.2 CLOSE-OUT PROCEDURES

- A. Contractor shall notify Owner five [5] days prior to the work being complete to establish the desired inspection date. Owner / RDA will either proceed with the inspection or notify Contractor of unfulfilled requirements.
 - 1. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for punch list inspection.
- B. Owner / RDA shall inspect the completed project and notify the Contractor of any deficiencies. Deficiencies will form 'punch list' for final acceptance.
- C. Provide submittals to Owner required by authorities having jurisdiction.
- D. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments, and sum remaining due.

1.3 PUNCHLIST REQUIREMENTS

- A. The Contractor shall review and inspect all work prior to notifying the Owner for a Punchlist inspection of the work. Provide written documentation certifying review along with documentation of Contractor generated Punchlist.
- B. If work is clearly not complete, the Punchlist will be suspended until such time that it is evident that the Contractor has completed and reviewed/inspected their own work.**
 - 1. RDA anticipates [1] punchlist inspection and [1] back-punch / final inspection as part of our services to the Owner.
 - 2. Failures by the Contractor to complete the work, complete punchlists, etc. may result in a backcharge to the Contractor for the additional time to closeout the project.
- C. The Contractor shall review and provide the noted repairs and corrective work necessary at each of the Punchlist inspections to allow project close out.
 - 1. Back-punch walk through may result in additional punchlist items which need to be addressed by the Contractor.
- D. The Contractor shall provide adequate time in the construction schedule to accomplish punchout work within the overall contract period indicated within the bid documents.
- E. The failure to identify any punchlist item during a walk through / inspection does not release the Contractor from contractual responsibility to address any item during the warranty period.

1.4 SUBSTANTIAL COMPLETION

- A. Certificate of Substantial Completion will be issued upon completion of all the work.

1.5 PREREQUISITES TO FINAL ACCEPTANCE AND PAYMENT

- A. Prior to acceptance and final payment, all claims or disputes must have been resolved and the Contractor must have provided the following items to the Owner:
 - 1. Notarized affidavit of waiver of liens [contractor of record], sub-contractors and material suppliers
 - 2. Certificates of release from authorities having jurisdiction over permitting.
 - 3. Final statement of charges [100% application for payment].

- a. Submit a final Application for Payment according to Section 01 29 00, Payment Procedures.
4. Documented evidence of completing 'punch list' as applicable.
5. Manufacturer's original warranties, including contractor maintenance agreements and warranties as applicable.
6. Evidence that claims have been settled.
7. O+M Manuals
8. Manufacturer's maintenance and repair instructions.
9. Record Drawings.
10. Final cleaning of all work areas.
11. Restore all work staging and lay-out areas to pre-construction conditions, including but not limited to, removal of debris, temporary facilities, grading and grass seeding and cleaning or repair of impacted structures.

1.6 PHOTOGRAPHIC DOCUMENTATION

- A. When requested by the Owner, photos of the completed punch list along with any supporting documentation can be submitted, in lieu of a final walkthrough.

1.7 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
 1. Drawings.
 2. Specifications.
 3. Addenda.
 4. Change Directives/Orders and other modifications to the Contract.
 5. Reviewed Shop Drawings, Product Data, and Samples.
 6. Manufacturer's instruction for assembly, installation, and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress, not less than weekly.
- E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
 1. Manufacturer's name and product model and number.
 2. Product substitutions or alternates utilized.
 3. Changes made by Addenda and modifications.
- F. Submit documents to Architect.

1.8 WARRANTIES AND GUARANTEES

- A. General: The warranty and guarantee provisions of the General Conditions apply to all work of the contract, including but not limited to the following specific categories related to individual units of work specified in various sections of these specifications:
 1. **Refer to GDPM Contract Requirements / Terms and Conditions for additional information / requirements.**
 2. Special Project Warranty (Guarantee): A warranty specifically written and signed by the Contractor for a defined portion of the work, and, where required, countersigned by subcontractor, installer, manufacturer, or other entity engaged by the Contractor.
 3. Specified Product Warranty: A warranty which is required by the contract documents, to be provided for a manufactured product incorporated in the Work, regardless of whether manufacturer has published a similar warranty without regard for specific incorporation into the work, or has written and executed a special project warranty as a direct result of contract document requirements.

4. Coincidental Product Warranty: A warranty which is not specifically required by the Contract Documents (other than as specified in this Section); but which is available on a product incorporated into the work, by virtue of the fact that the manufacturer of the product has published a warranty in connection with purchases and users of the product without regard for specific applications except as otherwise limited by terms of the warranty.
- B. All work undertaken as part of the project shall be warranted for a period of not less than [1] year. Individual sections / products may have specific additional warranty requirements.
- C. Provide notarized copies of warranty documents to the Owner.
 1. Execute and assemble transferable warranty documents from subcontractors, suppliers, and manufacturers.
- D. Original warranties are required to be provided to the Owner prior to final payment.

1.9 OPERATION AND MAINTENANCE DATA

- A. Submit TWO sets prior to final inspection, bound in 8-1/2 x 11 inch text pages, three D side ring binders with durable plastic covers.
 1. **Submit one copy for review by the Architect/Owner, electronic submission preferred.** Submit at 75% of overall gross contract completion. Failure to submit O+M at this point will delay Applications for Payment.
 2. Prepare one final copy upon approval and correction of any missing or deficient items by the Architect/Owner.
 3. Provide (2) CDs of the O+M Manual in PDF format that is formatted and organized to match the hard copy.
- B. Prepare binder cover with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS" and title of project. Label on the front and spine of the binder.
- C. Internally subdivide binder contents with permanent page dividers, logically organized, with tab titles legibly printed under reinforced laminated plastic tabs.
- D. Contents:
 1. Part 1: Directory, listing names, addresses, and telephone numbers of Architect/Engineer, Contractor, subcontractors, and major equipment suppliers.
 2. Part 2: Permit and Inspection Information
 3. Part 3: Project submittals, organized by CSI division
 4. Part 4: Operation and maintenance instructions, arranged by system.
 - a. Building Products, Equipment, Applied Materials, and Finishes: Include product data, with catalog number, size, composition, and color and texture designations.
 - b. Each Item of Equipment and Each System: Include description of unit or system, and component parts. Identify function, normal operating characteristics, and limiting conditions. Include performance curves, with engineering data and tests, and complete nomenclature and model number of replaceable parts.
 - c. Operating Procedures: Include start-up, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shut-down, and emergency instructions. Include summer, winter, and special operating instructions.
 - d. Instructions for Care and Maintenance: Include manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.
 - e. Maintenance Requirements: Include routine procedures and guide for preventative maintenance and trouble shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
 - f. Include original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
 - g. Include original shop drawing submittals, fold larger submittals to fit into binder.

5. Part 5: Project documents and certificates.
 - a. Obtain warranties and bonds executed in duplicate by responsible subcontractors, suppliers, and manufacturers.
6. Part 6: Colors / finishes / samples
7. Part 7: Other documentation required.

1.10 FINAL CLEANING AND SITE REPAIR

- A. Final cleaning of all work areas:
 1. Execute final cleaning prior to final inspection.
 2. Clean interior and exterior surfaces exposed to view. Vacuum carpeted and soft surfaces.
 3. Clean interiors of all cabinetry.
 4. Clean all fixtures and finishes.
 5. Replace filters of operating equipment.
 6. Remove waste and surplus materials, rubbish, and construction facilities from site.
- B. Restore all work staging and lay-out areas to pre-construction conditions, including but not limited to, removal of debris, temporary facilities, grading and grass seeding and cleaning or repair of impacted structures.

END OF SECTION

SECTION 02 41 16 - SELECTIVE DEMOLITION

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Demolishing designated building equipment and fixtures.
 - 2. Demolishing designated construction.
 - 3. Cutting and alterations for completion of the Work.
 - 4. Removing designated items for salvage by GDPM.
 - 5. Protecting items designated to remain.
 - 6. Removing demolished materials.

1.2 CLOSEOUT SUBMITTALS

- A. Project Record Documents: Record actual locations of capped utilities, concealed utilities, discovered during demolition and any subsurface obstructions or conditions that require noting.

1.3 QUALITY ASSURANCE

- A. Conform to applicable code for demolition work, dust control, protection, products requiring electrical disconnection and re-connection
- B. Conform to applicable code for procedures when hazardous or contaminated materials are discovered.
- C. Obtain required permits from authorities having jurisdiction.

1.4 SCHEDULING

- A. Schedule Work to coincide with proposed alterations and improvements.
- B. Coordinate Work with Work by Others and Work by Owner as needed.
- C. Coordinate utility and building service interruptions with Owner.
 - 1. Do not disable or disrupt site fire or life safety systems without three days prior written notice to Owner.
- D. Schedule tie-ins to existing systems to minimize disruption.

1.5 PROJECT CONDITIONS

- A. Cease operations immediately if structure appears to be in danger and notify Architect. Do not resume operations until directed.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.1 PREPARATION

- A. Notify affected utility companies before starting work and comply with their requirements.
- B. Call Local Utility Line Information service not less than three working days before performing Work.
 - 1. Request underground utilities to be located and marked within and surrounding construction areas. Supplement with private locator company as is applicable and required to fully locate and identify existing underground utilities, including both public and private.

- C. Mark location and termination of utilities.
- D. Erect, and maintain temporary barriers and security devices including warning signs and lights, and similar measures, for protection of the public, Owner, and existing improvements indicated to remain.
- E. Erect and maintain weatherproof closures for exterior openings as applicable to work/scope.
- F. Erect and maintain temporary partitions.
- G. Prevent movement of structure; provide temporary bracing and shoring as required.
- H. Provide appropriate temporary signage.
- I. Do not close or obstruct building egress path.
- J. Do not disable or disrupt building fire or life safety systems without **three** days prior written notice to Owner. Coordinate with Fire Department / Building Official.
- K. Protect existing structure / items to remain.

3.2 SALVAGE REQUIREMENTS

- A. Coordinate with Owner to identify building components and equipment required to be removed and delivered to Owner.
- B. Tag components and equipment Owner designates for salvage.
- C. Protect designated salvage items from demolition operations until items can be removed.
- D. Carefully remove building components and equipment indicated to be salvaged.
- E. Disassemble as required to permit removal from building.
- F. Package small and loose parts to avoid loss.
- G. Mark equipment and packaged parts to permit identification and consolidation of components of each salvaged item.
- H. Prepare assembly instructions consistent with disassembled parts. Package assembly instructions in protective envelope and securely attach to each disassembled salvaged item.
- I. Deliver salvaged items to location identified by GDPM. Obtain signed receipt from GDPM.

3.3 DEMOLITION

- A. Provide all demolition and removals necessary for the proposed work. Field coordinate all conditions with the design intended on the drawings.
 - 1. Drawings are diagrammatic and may not reflect the full extent of demolition / removals required to accomplish the proposed scope of work.
 - 2. The Contractor shall coordinate design intent and verify that all demolition work and restoration / repair work required is included in the scope of the project, regardless of specifically being noted on the drawings.
 - 3. Work includes abandoned furnishings, equipment, and building components that are required to be removed to render rent ready.
 - 4. Confirm with GDPM personnel prior to demolition to verify any items to be salvaged and turned over to GDPM.
- B. Provide abatement of hazardous materials from the buildings as applicable for the completion of the work.
- C. Conduct demolition to minimize interference with adjacent and occupied buildings/units.
- D. Maintain protected egress from and access to adjacent existing buildings/units at all times.

- E. Cease operations immediately when structure appears to be in danger and notify Architect/Engineer.
- F. Disconnect and remove utilities within demolition areas, refer to Drawings.
- G. Cap and identify abandoned utilities at termination points when utility is not completely removed.
- H. Do not close or obstruct roadways or sidewalks without permits.
- I. Demolish in orderly and careful manner. Protect existing improvements.
- J. Carefully remove building components indicated to be reused.
- K. Disassemble components as required to permit removal.
- L. Box and label contents for all items scheduled to salvage. Obtain sign off.
- M. Remove demolished materials from site except where specifically noted otherwise. Do not burn or bury materials on site.
- N. Remove materials as Work progresses.
- O. Upon completion of Work, leave areas in clean condition.
- P. Remove temporary Work.

3.4 CLEAN UP

- A. Remove demolished materials from site as work progresses.
- B. Leave areas of work in clean condition.

END OF SECTION

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SECTION 02 50 00 - HAZARDOUS MATERIALS SPECIFICATIONS

PART 1 GENERAL

1.1 HAZARDOUS MATERIALS

- A. There are no known hazardous materials in the area of work of this project.

1.2 SUMMARY

- A. Contractors must comply with Occupational Safety and Health Administration regulation 29 CFR 1926.62 "Lead in Construction Standard" as well as the Environmental Protection Agency Lead, Renovation, Repair and Painting Rule.
- B. Contractor shall follow all applicable EPA rules and regulations when working with hazardous materials. It shall be the contractor's responsibility to remain in compliance at all times during the project.
- C. If any work person encounters any material which they suspect may be hazardous or toxic, they shall immediately advise the Owner. The Contractor shall take immediate and appropriate action to protect the building users and workers in accordance with federal, state, and local laws, codes and regulations. The architect and architect's consultants shall have no responsibility for the discovery, presence, handling, removal or disposal of or exposure of persons to hazardous materials in any form at the project site, including but not limited to asbestos, asbestos products, polychlorinated biphenyl (pcb) or other toxic substances.
1. The contractor is hereby advised that RDA Group Architects, LLC is not a design professional in the determination of the presence of hazardous materials, nor is RDA a design professional involved in making recommendations regarding the testing, removal, encapsulation or other corrective measures pertaining to hazardous materials.
 2. If the work which is to be performed under the contract interfaces in any way with the existing components which contain hazardous materials, it is the contractor's responsibility to contact the owner's environmental consultant regarding the proper means & methods to be utilized in dealing with hazardous materials.
 3. By execution of the contract for construction, the contractor hereby agrees to bring no claim for negligence, breach of contract, indemnity or otherwise against the architect, his principles, employees, agents or consultants if such a claim in any way would involve the investigation of or remedial work related to hazardous materials in the project.
 4. By execution of the contract for construction, the contractor further agrees to defend, indemnify and hold the architect, his principles, employees, agents or consultants harmless from any such asbestos or other hazardous materials related claims that may be brought by the contractor's subcontractors, suppliers or other third parties who may be acting under the direction of the contractor pursuant to this project.

END OF SECTION

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SECTION 07 84 00 - FIRESTOPPING

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Firestopping through-penetrations of fire rated assemblies.
 - 2. Firestopping joints in fire rated assemblies.
 - 3. Smoke sealing at joints between floor slabs and exterior walls.
 - 4. Smoke sealing penetrations and joints of smoke partitions.

1.2 REFERENCES

- A. ASTM International:
 - 1. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
 - 2. ASTM E119 - Standard Test Methods for Fire Tests of Building Construction and Materials.
 - 3. ASTM E814 - Standard Test Method for Fire Tests of Through-Penetration Fire Stops.
 - 4. ASTM E1966 - Standard Test Method for Fire-Resistive Joint Systems.
- B. Forest Stewardship Council:
 - 1. FSC Guidelines - Forest Stewardship Council Guidelines.
- C. Intertek Testing Services (Warnock Hersey Listed):
 - 1. WH - Certification Listings.
- D. South Coast Air Quality Management District:
 - 1. SCAQMD Rule 1168 - Adhesive and Sealant Applications.
- E. Underwriters Laboratories Inc.:
 - 1. UL 263 - Fire Tests of Building Construction and Materials.
 - 2. UL 1479 - Fire Tests of Through-Penetration Firestops.
 - 3. UL 2079 - Tests for Fire Resistance of Building Joint Systems.
 - 4. UL - Fire Resistance Directory.

1.3 DEFINITIONS

- A. Firestopping (Through-Penetration Protection System): Sealing or stuffing material or assembly placed in spaces between and penetrations through building materials to arrest movement of fire, smoke, heat, and hot gases through fire rated construction.

1.4 PERFORMANCE REQUIREMENTS

- A. Conform to UL for fire resistance ratings and surface burning characteristics.

1.5 SUBMITTALS

- A. Product Data: Submit data on product characteristics, performance and limitation criteria.
- B. Manufacturer's Installation Instructions: Submit preparation and installation instructions.
- C. Manufacturer's Certificate: Certify products meet or exceed specified requirements and applicable code requirements.

1.6 QUALITY ASSURANCE

- A. Through Penetration Firestopping of Fire Rated Assemblies: UL 1479 or ASTM E814 with 0.10 inch water gage minimum positive pressure differential to achieve fire F-Ratings and temperature T-Ratings as indicated on Drawings, but not less than 1-hour.
 - 1. Floor / Wall Penetrations: Fire F-Ratings as indicated on Drawings, but not less than 1-hour.
- B. Through Penetration Firestopping of Non-Fire Rated Floor and Roof Assemblies: Materials to resist free passage of flame and products of combustion.
- C. Fire Resistant Joints in Fire Rated Floor, Roof, and Wall Assemblies: ASTM E1966 or UL 2079 to achieve fire resistant rating as indicated on Drawings for assembly in which joint is installed.
- D. Surface Burning Characteristics: Maximum 25/450 flame spread/smoke developed index when tested in accordance with ASTM E84.

1.7 ENVIRONMENTAL REQUIREMENTS

- A. Maintain this minimum temperature before, during, and for minimum 3 days after installation of materials.
- B. Provide ventilation in areas to receive solvent cured materials.

PART 2 PRODUCTS

2.1 FIRESTOPPING

- A. Manufacturers:
 - 1. 3M Fire Protection Products
 - 2. United States Gypsum Co.
 - 3. Equal.
- B. Product Description: Different types of products by multiple manufacturers are acceptable as required to meet specified system description and performance requirements; provide only one type for each similar application.
 - 1. Silicone Firestopping Elastomeric Firestopping: Single component silicone elastomeric compound and compatible silicone sealant.
 - a. Interior Sealants and Sealant Primers: Maximum volatile organic compound content in accordance with SCAQMD Rule 1168.
 - 2. Foam Firestopping Compounds: Single component foam compound.
 - 3. Fiber Stuffing and Sealant Firestopping: Composite of mineral fiber stuffing insulation with silicone elastomer for smoke stopping.
 - 4. Intumescent Firestopping: Intumescent putty compound which expands on exposure to surface heat gain.

2.2 ACCESSORIES

- A. Primer: Type recommended by firestopping manufacturer for specific substrate surfaces and suitable for required fire ratings.
- B. Installation Accessories: Provide clips, collars, fasteners, temporary stops or dams, and other devices required to position and retain materials in place.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify openings are ready to receive firestopping.

3.2 PREPARATION

- A. Clean substrate surfaces of dirt, dust, grease, oil, loose material, or other matter affecting bond of firestopping material.
- B. Remove incompatible materials affecting bond.
- C. Install backing materials to arrest liquid material leakage.

3.3 APPLICATION

- A. Install material at fire rated construction perimeters and openings containing penetrating sleeves, piping, ductwork, conduit and other items, requiring firestopping.
- B. Apply primer where recommended by manufacturer for type of firestopping material and substrate involved, and as required for compliance with required fire ratings.
- C. Apply firestopping material in sufficient thickness to achieve required fire and smoke rating to uniform density and texture.
- D. Place foamed material in layers to ensure homogenous density, filling cavities and spaces. Place sealant to completely seal junctions with adjacent dissimilar materials.

3.4 FIELD QUALITY CONTROL

- A. Inspect installed firestopping for compliance with specifications and submitted schedule.

3.5 PROTECTION OF INSTALLED CONSTRUCTION

- A. Protect adjacent surfaces from damage by material installation.

END OF SECTION

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SECTION 07 90 00 - JOINT PROTECTION

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes sealants and joint backing.

1.2 SUBMITTALS

- A. Product Data: Submit data indicating sealant chemical characteristics, performance criteria, substrate preparation, limitations, and color availability.

1.3 ENVIRONMENTAL REQUIREMENTS

- A. Maintain temperature and humidity recommended by sealant manufacturer during and after installation.

1.4 QUALITY ASSURANCE

- A. Sealant shall be installed by a qualified sealant applicator for any/all joint sealant exposed to view. Owner reserves the right to request a mockup of the quality for the joint sealant installation.

PART 2 PRODUCTS

2.1 JOINT SEALERS

- A. Manufacturers:
 - 1. Tremco [basis of design]
 - 2. Sika
 - 3. GE Silicones.
 - 4. Pecora Corp.
 - 5. DAP
- B. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer, based on testing and field experience.
- C. Low-Emitting Interior Sealants: Sealants and sealant primers used inside the weatherproofing system shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."
- D. Liquid-Applied Sealants: Comply with ASTM C920 and other requirements indicated for each liquid-applied chemically curing sealant specified, including those referencing ASTM C920 classifications for type, grade, class, and uses related to exposure and joint substrates.
- E. Suitability for Contact with Food: Where elastomeric sealants are indicated for joints that will come in repeated contact with food, provide products that comply with 21 CFR 177.2600.
- F. Additional Movement Capability: Where additional movement capability is specified, provide products with the capability, when tested for adhesion and cohesion under maximum cyclic movement per ASTM C719, to withstand the specified percentage change in the joint width existing at the time of installation and remain in compliance with other requirements of ASTM C920 for uses indicated.
- G. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range, unless otherwise noted.

2.2 SILICONE JOINT SEALANTS:

- A. **Type S-1:** Single component, nonsag, Silicone Joint Sealant: ASTM C920, Type S, Grade NS, Class 100/50, Use NT

1. Tremco Spectrem 1 or Spectrem 800 or Equal
- B. **Type S-2:** Single Component, nonsag, Silicone Joint Sealant: ASTM C920, Type S, Grade NS, Class 50, use NT
 1. Tremco Spectrem 2 or Spectrem 3 or Equal
- C. **Type S-3:** Multi-Component, Nonsag, Silicone Joint Sealant: ASTM C920, Type M, Grade NS, Class 50, Use NT
 1. Tremco Spectrem 4-TS or Equal
- D. **Type S-4:** Single Component, nonsag, Traffic-Grade, Silicone Joint Sealant: ASTM C920, Type S, Grade NS, Class 100/50, Use T
 1. Tremco Spectrem 800 or Equal
- E. **Type S-5:** Mildew Resistant, Single Component, Silicone Joint Sealant: ASTM C920, Type S, Grade NS, Class 25, Use NT
 1. Tremco Tremsil 200 Sanitary or Equal

2.3 URETHANE JOINT SEALANTS

- A. **Type U-1:** Single Component, nonsag, Urethane Joint Sealant: ASTM C920, Type S, Grade NS, Class 25 or 35, Use NT:
 1. Tremco Dymonic or Dymonic FC or Equal
- B. **Type U-2:** Single Component, nonsag, Traffic Grade, Urethane Joint Sealant: ASTM C920, Type S, Grade NS, Class 25, Use T.
 1. Tremco Vulkem 116 or Equal.
- C. **Type U-3:** Multi-Component, nonsag, Urethane Joint Sealant: ASTM C920, Type M, Grade NS, Class 25, Use T.
 1. Tremco Dymeric 240 or Dymeric 240 FC or Equal
- D. **Type U-4:** Multi-Component, nonsag, Urethane Joint Sealant: ASTM C920, Type M, Grade NS, Class 25, Use NT.
 1. Tremco Vulken 227 or Equal
- E. **Type U-5:** Multi-Component, nonsag, Traffic Grade, Urethane Joint Sealant: ASTM C920, Type M, Grade NS, Class 25, Use T.
 1. Tremco Vulken 227 or Equal

2.4 BUTYL JOINT SEALANTS

- A. **Type B-1:** Butyl Rubber based Joint Sealants: ASTM C 1311
 1. Tremco General Purpose Butyl Sealant or Equal

2.5 LATEX JOINT SEALANTS

- A. **Type L-1:** Latex Joint Sealant: Acrylic latex or Siliconized Acrylic Latex: ASTM C834, Type OP, Grade NF or better
 1. Tremco Tremflex 834 or Equal.
- B. **Type L-2:** Paintable Mildew-Resistant Latex Joint Sealant: Acrylic Latex or Siliconized Acrylic Latex: ASTM C834, Type OP, Grade NF or better.
 1. Tremco Tremflex 834 or Equal.

2.6 ACCESSORIES

- A. General: Provide sealant backings of material and type that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.
- B. Cylindrical Sealant Backings: ASTM C1330, Type C (closed-cell material with a surface skin) as approved in writing by joint-sealant manufacturer for joint application indicated, and of size and

density to control sealant depth and otherwise contribute to producing optimum sealant performance:

1. Oversized to 30 to 50 percent larger than joint width.
- C. Elastomeric Tubing Sealant Backings: Neoprene, butyl, EPDM, or silicone tubing complying with ASTM D1056, nonabsorbent to water and gas, and capable of remaining resilient at temperatures down to minus 26 deg F. Provide products with low compression set and of size and shape to provide a secondary seal, to control sealant depth, and to otherwise contribute to optimum sealant performance.
- D. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint where such adhesion would result in sealant failure. Provide self-adhesive tape where applicable.
- E. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated. Non-staining type, recommended by sealant manufacturer to suit application.
- F. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.
- G. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify substrate surfaces and joint openings are ready to receive work.
- B. Verify joint backing and release tapes are compatible with sealant.

3.2 PREPARATION

- A. Remove loose materials and foreign matter impairing adhesion of sealant.
- B. Clean and prime joints.
- C. Perform preparation in accordance with ASTM C1193.

3.3 INSTALLATION

- A. Perform installation in accordance with ASTM C1193.
- B. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer.
- C. Install bond breaker where joint backing is not used.
- D. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.**
- E. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.
- F. Tool joints concave.

3.4 SCHEDULE

- A. Joint-Sealant Application: Interior joints in vertical surfaces and horizontal non-traffic surfaces, subject to movement, unless otherwise noted.
 1. Joint locations such as, but not limited to:
 - a. Control joints on exposed interior surfaces of exterior walls.
 - b. Interior joints where interior partitions meet exterior walls of dissimilar materials and components.
 - c. Other joints as indicated on Drawings.

2. Provide one of the following acceptable sealants as approved by manufacturer for substrates and uses indicated: **Type U-1**
 3. Color: As selected by Architect from manufacturer's full range of colors. Paintable Sealant, prep for painted finish.
- B. Joint-Sealant Application: Interior joints in vertical surfaces subject to abuse and movement.
1. Joint locations such as, but not limited to:
 - a. Vertical joints, including control joints and joints between masonry and structural support members, on exposed surfaces of interior unit masonry walls and partitions.
 2. Provide one of the following acceptable sealants as approved by manufacturer for substrates and uses indicated: **Type U-2**
 3. Color: As selected by Architect from manufacturer's full range of colors.
- C. Joint-Sealant Application: Interior joints in vertical surfaces not subject to movement.
1. Joint locations such as, but not limited to:
 - a. Interior perimeter joints of exterior openings.
 - b. Perimeter joints between interior wall surfaces and frames of interior doors, windows, and elevator entrances.
 - c. Interior joints between dissimilar materials where a gap is created where materials meet, unless otherwise noted.
 2. Provide one of the following acceptable sealants as approved by manufacturer for substrates and uses indicated: **Type L-1, Type L-2**
 3. Color: As selected by Architect from manufacturer's full range of colors.
- D. Joint-Sealant Application: Exterior joints under metal thresholds and saddles, sill plates, or as bedding sealant for sheet metal flashing and frames of metal or wood.
1. Provide one of the following acceptable sealants as approved by manufacturer for substrates and uses indicated: **Type S-1, Type U-1, Type B-1**
 2. Color: As selected by Architect from manufacturer's full range of colors.

END OF SECTION

SECTION 09 21 16 - GYPSUM BOARD ASSEMBLIES

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes gypsum board with joint treatment.

1.2 SUBMITTALS

- A. Product Data: Submit data on each type of gypsum board, backer board, joint tape and accessories.

1.3 QUALITY ASSURANCE

- A. Perform Work in accordance with GA-201 - Gypsum Board for Walls and Ceilings. GA-214 - Recommended Specification: Levels of Gypsum Board Finish. GA-216 - Recommended Specifications for the Application and Finishing of Gypsum Board. GA-600 - Fire Resistance Design Manual.
- B. Surface Burning Characteristics:
 - 1. Textile Wall Coverings: Comply with one of the following:
 - a. Maximum 25/450 flame spread/smoke developed index when tested in accordance with ASTM E84.
- C. Mock-up:
 - 1. Provide mockup of the quality of finishes for one wall that indicates the level of finish quality. Approved mockup will become standard for comparing other work.
 - 2. Provide mockup of the quality of finishes for one ceiling area that indicates the level of finish quality for knockdown stomped ceiling finishes. Approved mockup will become standard for comparing other work.

PART 2 PRODUCTS

2.1 GYPSUM BOARD ASSEMBLIES

- A. Manufacturers:
 - 1. United States Gypsum Co.
 - 2. BPB Americas Inc.
 - 3. G-P Gypsum Corp.
 - 4. National Gypsum Co.
 - 5. Certainteed.
- B. Gypsum Board [Type GB-1]: ASTM C1396; Type X fire resistant type, high density; 5/8 inch thick, maximum available length in place; ends cut square, tapered square edges.

2.2 ACCESSORIES

- A. Gypsum Board Accessories: ASTM C1047; metal, metal and paper combination; corner beads, edge trim, and expansion joints.
 - 1. Metal Accessories: Galvanized steel.
 - 2. Edge Trim: Type LC or U bead.
- B. Joint Materials: ASTM C475/C475M, reinforcing tape, joint compound, and water.
- C. Fasteners: ASTM C1002; Type S12 hardened screws, length to suit application.
- D. Gypsum Board Screws: ASTM C1002; Type W or S hardened screws, length to suit application.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify site conditions are ready to receive work.

3.2 INSTALLATION

- A. Gypsum Board:
 - 1. Install gypsum board in accordance with GA-216 and GA-600.
 - 2. Fasten gypsum board to furring or framing with screws.
 - 3. Place corner beads at external corners. Use longest practical length. Place edge trim where gypsum board abuts dissimilar materials.
 - 4. Seal cut edges and holes in moisture resistant gypsum board with sealant.
- B. Joint Treatment:
 - 1. Finish in accordance with GA-214 Level 4.
 - 2. Tape, fill, and sand exposed joints, edges, and corners to produce smooth surface ready to receive finishes.
 - 3. Feather coats onto adjoining surfaces so camber is maximum 1/32 inch.

3.3 SCHEDULE

- A. Match existing / adjacent finishes as applicable to the conditions. General intent is repair existing gypsum board finishes to a Level 4 standard finish. Prep, repair, and skim as required to achieve desired finish.
- B. Interior walls [except where noted otherwise]: GB-1. Level 4 finish.
- C. Interior Walls / Ceilings at Demising Wall Locations: GB-1, Level 4 finish.

END OF SECTION

SECTION 09 90 00 - PAINTING AND COATING

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes surface preparation and field application of paints and other coatings.
- B. Paint/Stain all exposed surfaces, new and existing, unless otherwise indicated.
 - 1. Interior Work
 - a. Walls and ceilings.
 - b. Conduits / Junction boxes
- C. Do not paint prefinished items, finished metal surfaces, operating parts, labels, and materials obviously intended to be left exposed such as brick and tile.
- D. Unless otherwise indicated do not paint concealed surfaces.
- E. Obtain primers and undercoat materials for each coating system from the same manufacturer as the finish coats. Primer and finish coat shall be factory applied, finish coat shall be field applied.
- F. **Extra Materials:** Deliver to Owner **any extra materials**, properly labeled, factory sealed, of each color and type of finish coat paint used on project for each building in contract. Materials shall be signed for by GDPM Construction Inspector.
- G. Minimum surface temperature of 50 degrees required for all coating systems.
- H. Store all materials in tightly closed containers when not in use, away from heat, electrical equipment, sparks and open flames. Use approved bonding and grounding procedures. Keep out of the reach of children and residents.
- I. Transfer materials to approved containers with complete and appropriate labeling.

1.2 APPLICATORS QUALIFICATIONS

- A. Engage an experienced applicator with a minimum of five years experience and who has completed painting systems application similar in materials and extend to those indicated for the Project and that have resulted in a construction record of successful in-service performance.

1.3 SUBMITTALS

- A. Product Data and Color Samples: Provide product data on each coating system component indicating VOC and environmental requirements. Coordinate coating systems for each material/substrate.

1.4 MOCKUP

- A. Full-coat finish sample (benchmark sample) of each type of coating, substrate, color, and finish required in area of not less than 100 sq. ft. Comply with PDCA P5. Contractor shall not begin work until final approval is given on color and finish.

1.5 REFERENCES AND REGULATIONS:

- A. Standards: Comply with applicable provisions and recommendations of the following, except when otherwise shown or specified:
 - 1. OSHA Safety Standards for the Construction Industry, Title 29 - Labor, Subtitle B – Regulations Relating to Labor, Occupational Safety and Health Administration (OSHA) 1926, 07/01/93 editions.
 - 2. OSHA Worker Safety and Health Act Regulation 29 CFR No. Parts 1900 through 1910.1400, 07/01/93 and later editions.
 - 3. SSPC Volume 1, Good Painting Practice, 1989 edition.

4. SSPC Volume 2, Systems and Specifications, 1991 edition, Surface Preparation Guide and Paint Application Specifications of the Steel Structures Painting Council.
 5. NACE Standards, Volume I and II, 1992 editions of the National Association of Corrosion Engineers.
 6. SSPC and NACE Painter Safety Guidelines, latest editions.
- B. Requirements of Regulatory Agencies, conform with the following:
1. Clean Air Act (CAA) – hazardous Air Emissions by U.S. EPA or State Agency under Regulation 40 CFR 61 or state equivalent.
 2. Clean Water Act (CWA) – hazardous Water Releases by U.S. EPA or State Agency under Regulation 40 CFR 116 through 117 or state equivalent.
 3. Toxic Substances Control Act (TSCA) – Toxic substance by U.S. EPA under Regulation 40 CFR 761.
 4. Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or “SuperFund”) – Uncontrolled Hazardous Waste Sites and Hazardous Substance Release by U.S. EPA under Regulation 40 CFR 302.
 5. Resource Conservation and Recovery Act (RCRA) – Generation, Transportation, Treatment, Storage and Disposal of hazardous waste by U.S. EPA or State Agency under Regulation 40 CFR 260 through 267 or state equivalent.
 6. Hazardous and Solid Waste Amendments (HSWA) – Further regulation of hazardous waste by U.S. EPA or State Agency under Regulation 40 CFR through 267 or state equivalent.
 7. Hazardous Material Transportation Act (HMTA) – Transportation of Hazardous Material by DOT or State Agency under Regulation 49 CFR 171 through 179 or state equivalent.

1.6 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: Submit maintenance and cleaning instructions.

1.7 QUALITY ASSURANCE

- A. Surface Burning Characteristics:
1. Fire Retardant Finishes: Maximum 25/450 flame spread/smoke developed index when tested in accordance with ASTM E84.

1.8 ENVIRONMENTAL REQUIREMENTS

- A. Store and apply materials in environmental conditions required by manufacturer's instructions.

PART 2 PRODUCTS

2.1 COLORS AND FINISHES

- A. Color Pigments: Pure, non-fading, applicable types to suit substrates and service indicated.
1. Lead: Measurable lead content in either the pigment or binder will not be permitted.
 2. The finish coats shall match colors selected.
- B. Finish Quality:
1. Finishes shall exhibit a high quality, commercial grade appearance of uniform thickness.
 2. Finishes shall be free of runs, sags, drips, waves, orange peel, festoons, dry spray, cloudiness, spotting, ropiness, brush marks, roller marks, fish eyes or other surface imperfections, voids, discontinuities, pinholes, holidays and overspray.
 3. Final coat shall be uniform in texture, color and gloss, and shall provide an acceptable match with the approved drawdown sample sheet.

2.2 COATINGS

- A. Manufacturer
1. Sherwin-Williams (SW)
 2. PPG Porter
 3. Benjamin Moore

- B. Colors: As selected from a full range of manufacturer's offerings, including premium colors.

2.3 INTERIOR COATINGS

- A. Interior Latex Primer: SW ProMar 200 Zero VOC Wall Primer B28W02600, or equal.
 - 1. Interior Latex Primer
 - 2. VOC: maximum 0g/L; 0.0 lb/gal
 - 3. Volume Solids: 26 +/- 2%
- B. Interior Latex: SW ProMar 200 Zero VOC Interior Latex Flat B30-2600 Series, or equal.
 - 1. Interior Latex Flat Acrylic
 - 2. VOC: maximum 0g/L; 0.0 lb/gal
 - 3. Volume Solids: 41 +/- 2%
- C. Interior Latex: SW ProMar 200 Zero VOC Eg-Shel B20-2600 Series, or equal.
 - 1. Interior Latex Eggshell Acrylic
 - 2. VOC: maximum 0g/L; 0.0 lb/gal
 - 3. Volume Solids: 42 +/- 2%
- D. Interior Latex: SW ProMar 200 Zero VOC Semi-Gloss B31-2600 Series, or equal.
 - 1. Interior Latex Semi-Gloss Acrylic
 - 2. VOC: maximum 0g/L; 0.0 lb/gal
 - 3. Volume Solids: 39 +/- 2%
- E. Interior Acrylic Primer: SW Pro Industrial DTM Acrylic Primer B66W1
 - 1. Interior Acrylic Primer
 - 2. VOC: <150 g/L, 1.25 lb/gal
 - 3. Volume Solids: 46% +/- 2%
- F. Interior Acrylic Finish: SW DTM Acrylic Finish B66W01151 Series
 - 1. Interior Acrylic Coating
 - 2. VOC: <50 g/L, 0.42 lb/gal

PART 3 EXECUTION

3.1 SURFACE PREPARATION

- A. Comply with paint manufacturer's written instructions for surface preparation, environmental and substrate conditions, product mixing, and application.
- B. Perform all surface preparation in accordance with SSPC specifications, guidelines and good painting practices.
- C. Patch all holes and imperfections with spackle joint compound and sand smooth.
- D. Seal all stains from water, smoke, ink, pencil, grease, etc. with SW Prep-Rite Interior Latex Primer or equal.
- E. Fill all cracks, voids and crevices with caulk after priming the surface.
- F. Do not paint until surface is thoroughly dry and in sound condition.

3.2 APPLICATION

- A. Examination and Verification of Condition: Contractor shall verify the areas and conditions under which the work is to be performed and notify the Owner in writing of conditions detrimental to the proper and timely completion of the Work. Do not proceed with the Work until satisfactory conditions have been corrected. Do not coat over chalk, dirt, scale, moisture, oil, surface contaminants, coatings that have exceeded the manufacturer's re-coat guidelines, or conditions otherwise detrimental to the formation of a durable high quality coating system.
- B. Comply with manufacturer's instructions and SSPC Good Paint Practices Volumes 1 and 2.

- C. Comply with OSHA regulations, City of Dayton, State of Ohio and Federal laws, ordinances, and guidelines.
- D. Coating systems require a minimum surface temperature of 77 degrees F at 50% RH for proper drying and curing with a minimum temperature of 50 degrees and a maximum relative humidity of 85%. Follow label directions for each type of coating. Substrate temperatures to be coated shall be a minimum of 5 degree F above dew point and rising. Ambient surface to be painted and coating materials shall be a minimum maintained temperature of 50 degree F for 24 hours.
- E. Refer to SDS sheets before using any product.
- F. All surfaces must be thoroughly dry before coating applications.
- G. Apply coatings using brush or roller only.

3.3 INTERIOR PAINT APPLICATION SCHEDULE

- A. Gypsum Board:
 - 1. Concrete / Gypsum board ceilings:
 - a. Interior Latex Primer: SW ProMar 200 Zero VOC Primer at 1.3 MILS DFT per coat, one coat.
 - b. Interior Latex: SW ProMar 200 FLAT Interior Latex at 1.7 MILS DFT per coat, two coats.
 - 2. Concrete Block / Gypsum board walls:
 - a. Interior Latex Primer: SW ProMar 200 Zero VOC Primer at 1.3 MILS DFT per coat, one coat.
 - b. Interior Latex: SW ProMar 200 Zero VOC Eggshell Interior Latex at 1.6 MILS DFT, two coats.
- B. Steel Substrates [miscellaneous metal surfaces, conduits, etc.]:
 - 1. Interior Primer: SW DTM Acrylic Primer at 2.5-5.0 MILS DFT, one coat, where required for spot priming / bare metal conditions.
 - 2. Interior Acrylic: SW Pro Industrial DTM Acrylic Semi-Gloss Interior Coating at 2.5-4.0 MILS DFT, two coats.

3.4 CLEAN UP

- A. Clean site and remove debris and empty cans daily. Remove all paint from adjacent surfaces. Clean spills and splatters immediately.
- B. Clean hands and tools immediately after use with soap and water for water based products and with mineral spirits for oil based products.
- C. Follow manufacturer's safety recommendations when using mineral spirits.

3.5 ENVIRONMENTAL REQUIREMENTS

- A. Store and apply materials in environmental conditions required by manufacturer's instructions.

END OF SECTION

ELECTRICAL
SECTION 16000

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* * * END OF SECTION *

ELECTRICAL

SECTION 16000

1. RELATED DOCUMENTS

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

2. SCOPE

- A. The work included under this section shall consist of the furnishing of all labor, materials, equipment and incidentals necessary to install the electrical and related work indicated on the drawings and as called out in the following technical specifications. This shall include all testing and adjustments required and/or specified.

3. DESCRIPTION OF WORK

- A. The following is a summary of the principal categories of work under this section. Note, however, that this listing is for general information only and work will not necessarily be limited to these categories. The detailed drawings and the following specifications cover the full extent of the work.
- B. Power:
 - 1. Replace existing Fire Alarm system.
 - 2. Provide new branch circuits where required.
- C. Demolition:
 - 1. Removal of existing electrical devices that are noted on drawings and those devices in the area of the remodeling that are obviously necessary to be removed or relocated.

4. PERMITS, FEES, INSPECTIONS, LAWS & REGULATIONS

- A. Obtain and pay for all permits required in connection with this section of the work. In addition, pay all necessary inspection fees or similar charges. Laws and regulations which bear upon or affect this work shall be complied with and are hereby made a part of this section of the work. All work which such laws require to be inspected shall be submitted to the proper public officials for inspection.
- B. The requirements of the National Electrical Code (NEC) as well as all local ordinances and regulations, including those of the local utility company, shall be followed and adhered to with regard to the work under this section. Where the

contract documents (plans, specifications, etc.) exceed the minimum requirements of the NEC and/or other regulations, etc., the document requirements shall govern.

- C. At completion of the project furnish to the Owner, at no additional charge, a certificate(s) of inspection issued by the authorized agency (or agencies) having jurisdiction over this portion of the project, stating that all work executed under this section complies with the minimum requirements.
- D. Note that the General Building Permit will be obtained and paid for by the successful Electrical Contract Bidder. Contractors bidding this section of the work shall make a sufficient allowance in their bid to reimburse the Electrical Prime Contractor for their proportionate share of the permit cost.
- E. Additional fees, charges, etc. imposed by other contractors and/or tradesmen, professional consultants, etc. for services rendered in connection with performing any portion of the work under this section shall be included as part of the work. This shall include surveys, profiles and/or other miscellaneous drawings, etc. that may be required in addition to the contract documents by any governing authority.

5. SITE INVESTIGATION

- A. Prior to bidding, it is recommended that the contractor visit the job site and investigate all details which may have any effect on the installation, progress or completion of the project.
- B. When a bid is received, it will be assumed that the contractor has made the job site visit(s) and is familiar with the conditions as they exist and any adjustments and/or modifications that may be necessary in order to perform and complete the work as specified.
- C. At project start-up, certain areas will be designated for the storage of materials and equipment and cooperation with the Owner in minimizing interference with existing operations will be mandatory.

6. DRAWINGS

- A. The drawings prepared for this project are an outline to show where conduit, devices and distribution equipment must go in order to harmonize with the building and installations of the various trades. All work must be installed in accordance with the drawings insofar as possible. All drawings shall be carefully checked during the course of bidding and construction. If any discrepancies, errors or omissions or overlaps with other trades are discovered prior to or during the construction phase, notify the Engineer immediately for interpretation or correction. Note that an overlap with another trade does not relieve the contractor from the obligation of performing the work indicated on the drawings for this section of the project unless written notification stating such is obtained from the Engineer.

- B. Take all necessary measurements and be responsible for same, including clearances for all equipment that is to be furnished. The Engineer shall reserve the right to make minor location changes of equipment where such adjustments are deemed desirable from an appearance, installation or operational standpoint. Such changes will normally be initiated sufficiently in advance to avoid extra work or unduly delay progress on the project.
- C. In general, the conduit and wiring layouts shall be considered as diagrammatic for clearness and legibility and are to be used as a guide. Therefore, it is not intended that the drawings indicate all necessary offsets, junction boxes, pull boxes, etc. Conduit, wiring, fixtures, equipment, etc. may have to be offset, lowered or raised as required or as directed at the site in order to accommodate field conditions. In addition, relocate or shift equipment, fixtures and devices without cost, when so directed by the Engineer, providing such items have not been installed and the revised location is not greater than 10 feet from the location indicated.
- D. Note also that electrical connections indicated on the drawings may not be shown in the correct location for the equipment, fixtures, devices, etc., actually selected for the project. Verify all connection locations with shop drawings of the item to be installed or make field measurements before proceeding with any rough-in work.
- E. The general building and / or structural drawings shall be used to obtain dimensions and exact locations and as a check with other contractors to avoid interference with their work. Refer to applicable drawings on all branches of the work where other trades are involved on the project so that added field work and/or job delays resulting from conflicts between crafts can be avoided.

7. SPECIFICATIONS

- A. Specifications shall be interpreted in conjunction with the drawings hereinbefore described and if anything is shown on the drawings and not mentioned in the specifications or vice versa, it is to be included in the work the same as though clearly set forth by both.
- B. Furthermore, all materials or labor obviously required to fully complete the work shall be included in the bid, even though each item necessarily involved is not specifically mentioned or shown. Such work and/or material shall be furnished and shall be of the same grade or quality as the parts actually specified and shown. Should there be a conflict between the plans and specifications, the greater quantity or better quality shall be furnished.
- C. Should an overlap of work between the various trades become evident, the Engineer shall be notified. Such an event shall not relieve any trade of the responsibility for the work called for under his branch of the specifications until a written clarification or directive is issued concerning the matter.
- D. When selecting equipment to be used on this project, refer to Item EQUIPMENT

CLEARANCES AND REQUIREMENTS in these specifications.

- E. Note that all systems and items of equipment involved under this contract heading shall be furnished and installed in accordance with applicable requirements of federal, state and local codes including the ADA (Americans with Disabilities Act), OSHA requirements and applicable portions of NFPA. The above includes adhering to applicable requirements governing mounting heights for occupant operable controls.
- F. All references made to codes, standards, etc. in these specifications or on the drawings shall be taken to mean the latest edition, amendment and/or revision of such reference in effect as of the date indicated on the Bid Documents.

8. MATERIALS AND WORKMANSHIP

- A. Materials supplied under this contract shall be new and in strict accordance with the provisions of these plans and specifications. Any material required which is not specifically represented by a manufacturer's catalog number of quality standard, shall be subject to the approval of the Engineer in all cases. When two or more items of the same equipment are involved, they shall be identical in quality and made by the same manufacturer.
- B. Materials shall be the latest design of that manufacturer and shall be shipped to the job in the original container with proper identification as to size, type and dates of inspection and shipment.
- C. Electrical work shall be performed by mechanics skilled in their respective trades. Tool marks will not be permitted on any exposed materials, fixture or fitting. In addition, all exposed materials, fixtures, equipment, etc. shall be installed in straight horizontal and/or vertical lines, parallel to the building lines wherever possible. Carelessly executed work as well as workmanship that is determined to be below normal industry standards of best practice, and/or work not conforming to the requirements of this item, shall be redone or repaired as required prior to final acceptance.

9. CUTTING AND PATCHING

- A. All cutting and/or drilling of walls, slabs, structural members, etc., required in conjunction with work under this section shall be performed as part of the work and shall be done under the supervision of the General Contractor. Work shall be neatly done, without unnecessary removal of material. Holes, openings, etc. shall be located where they will not weaken the structure. No beams, joists, etc., shall be cut without written authorization from the Engineer.
- B. Cutting of holes in masonry and/or concrete shall be performed with a core drill to minimize spalling, etc. Locations shall be accurately determined and checked and the appropriate drill bit shall be used to minimize hole size.

- C. Sleeves or thimbles for these holes as well as escutcheons and trim plates shall be provided as described in Item SLEEVES AND THIMBLES.
- D. NOTE: Cutting of water lines, electric conduit or similar service lines in the course of work performed under this section shall be immediately repaired as part of the work of this section.
- E. Patching and/or repairing of all work, including finished surfaces, necessitated by the demolition or installation of work under this section shall be considered as part of this work. It shall, however, be performed by mechanics of the appropriate trade in order to achieve a workmanlike job. This shall include, but not be limited to, all items of concrete and masonry work, millwork, gypsum board and/or plaster work, painting, floor finishes and ceiling finishes as well as all other surface finishes.
- F. When the need for such patching or repairs arises, immediate arrangements shall be made with the appropriate trade(s) or with the General Contractor to perform the necessary work at no additional cost to the Owner. The final responsibility for acceptance of such work by the Owner's representative shall reside with the contractor for this section of the project.

10. PROTECTION

- A. Provide proper protection to the building during the execution of all work involved under this contract heading.
- B. This protection shall include covering all apparatus, building surfaces and/or other materials to protect same from dirt; adequate temporary connections to protect apparatus from damage of any sort; and required shielding to protect finished parts of the building. The following shall apply where applicable:
 - 1. Protect finished floors from chips and cutting oil by the use of a metal chip receiving pan and an oil proof floor cover.
 - 2. Protect equipment and finished surfaces from welding and cutting spatters with baffles and spatter blankets.
 - 3. Protect all electrical equipment finished surfaces from paint droppings, insulation adhesive and sizing droppings, etc., by the use of drop cloths.
- C. Exercise extreme caution in the handling and storage of tools, material and equipment in order to prevent damage to other contractor's work and/or materials and to avoid repair costs. All switchgear, fixtures and other electrical equipment stored at the site with exposed openings, bearings, etc. shall be covered to exclude dust and moisture. All stockpiled conduit shall be placed on dunnage and protected from weather and from entry of foreign material.
- D. Furnish necessary devices, strip heaters, wiring, connections, power, etc. to

provide temporary heat to keep moisture out of apparatus and equipment such as transformers, motors, etc. furnished under this section.

11. PREPARATION OF BIDS

- A. All bids shall be based upon furnishing and installing the make of materials and apparatus specified herein WITHOUT SUBSTITUTION, in order that all bids may be properly compared.
- B. Other materials, equipment or systems that the bidder may desire to use as a substitute for that specified will be considered IF PROPOSED AT THE TIME OF BIDDING and shown on the substitution sheet of the proposal. Such alternate items shall be of equally high quality with all safeguards, design features and operational requirements as shown on the drawings and/or as specified herein.
- C. It is understood that proposals to use such substitutes shall be made in addition to and separate from the base bid in order to receive consideration and the addition to or deduction from base bid, if any, shall be duly noted on the bid form.
- D. Regarding substitutes, note that any deviations from the following specifications or any special equipment requirements (ambient conditions, services, power conditioning, etc.) necessary for full time operation shall be clearly stated and completely itemized. Failure to meet these stipulations could result in additional expense that would be assigned to this section of the work and not considered as an extra. These substitute proposals will not, however, be considered as a basis for determining the low bidder unless they are specifically listed by Addendum as alternate proposals. Each substitute proposal offered shall list the manufacturer, the catalog number of the substitute item, and the specified item to be replaced by the substitute. In addition to this information, state the amount to be added to or deducted from base bid in the event the substitute proposal is accepted.
- E. If no proposals for substitutes are listed on the bid form, no such proposals will be permitted for later consideration unless delivery schedules or other factors beyond the Contractor's control justify same.
- F. If more than one make of material or equipment is specified, the proposed manufacturer, brand, type, etc. shall be identified. If this provision is not complied with, the Owner may then make this selection without change in contract price.
- G. Note that in the following specifications, where more than one manufacturer is listed for a particular item of operating equipment, the design will be based on the first named. If equipment by the other named manufacturer(s) or a proposed substitute requires redesign work, revised/modified services, or specific additional field work by other trade(s), the price submitted for providing this equipment must include the required additional amount to cover such work.
- H. Lump sum pricing by suppliers on two or more dissimilar classifications of materials, without an accompanying price breakdown on the individual

classifications, will not be tolerated. Notify the Engineer, upon receipt of a lump-sum quotation which prevents a legitimate comparison with other competitive individual quotations.

12. SHOP DRAWINGS

- A. Prepare or obtain from the manufacturer, certified shop or erection drawings of all items of equipment to be furnished under this section and submit copies of same as required for review. This shall be done as soon as possible, well prior to proceeding with installation or construction and in the proper sequence to avoid delays in the work, the work of the Owner or other contractors. Unless otherwise indicated, a minimum of ten (10) sets shall be submitted. These drawings shall be complete in every respect, showing pertinent details regarding size, external and internal features, mechanical and/or electrical arrangements, locations of connections, installation and mounting instructions, materials, gauges, electrical characteristics, wiring diagrams, and other information necessary to show compliance with the intent of the contract documents. Note that in the following items of this specification, where more than one equipment manufacturer is listed, the first named has been used as the basis for design. All departures or deviations in performance, service requirements, size, etc. from first named by the make submitted shall be noted on the shop drawings. Where departures or deviations do occur, the contractor shall additionally itemize same on the cover sheet that accompanies the submittals. Failure to do so will risk subsequent rejection at the job site. (With regard to voluntary substitutions, refer also to Item BIDDING in this specification and item EQUIPMENT CLEARANCES AND REQUIREMENTS.
- B. By submitting such drawings, the Contractor represents that he has selected and verified the materials and equipment, taken necessary field measurements, noted field construction criteria, etc., related thereto, or will do so, and has checked and coordinated the information contained within such submittals with the requirements of the Work and the Contract Documents.
- C. Materials and equipment to be furnished for this project shall be of current production by manufacturers regularly engaged in the manufacture of such items. When two or more similar units are required, they shall be the product of one manufacturer.
- D. The review of shop drawings shall not be construed as a complete check but will indicate only that the capacity, general method of construction and/or detailing is satisfactory. Carefully check and verify dimensions for installation and service requirements before ordering equipment for the project.
- E. Submittals shall be itemized on a standardized shop drawing submittal form stating the name of the project, specification section, paragraph and/or drawing numbers applicable to submittal and shall bear the contractor's review stamp as evidence that the items have been initially checked for compliance with Contract

Documents as stated above.

- F. After review, shop drawings will be returned marked in one of the following ways:
1. "NO EXCEPTIONS NOTED" - Copies may be distributed as required for construction, shipment, etc. to proceed.
 2. "EXCEPTIONS NOTED" - Contractor may proceed with and/or authorize construction, shipment, etc. taking into account the necessary corrections.
 3. "EXCEPTIONS NOTED - REVISE AND RESUBMIT" - Contractor will be

required to resubmit shop drawings in their entirety. No fabrication, erection or installation shall be authorized or initiated until shop drawings so marked have been completely revised, resubmitted and subsequently marked in accordance with either of the two preceding subparagraphs. Only shop drawings officially marked "NO EXCEPTIONS NOTED" or "EXCEPTIONS NOTED" will be permitted on the jobsite.
- G. Upon return of submittals take appropriate action as specified above. Note that any shop drawing copies received beyond the number required will be destroyed (not returned). Also note that if an insufficient number of copies has been submitted, no review will take place until all required copies have been received.
- H. Where resubmittal is required, four (4) copies will be so noted by the reviewer, of which two (2) copies will be returned for corrections (one (1) copy for the contractor and one (1) copy for the supplier/subcontractor).
- I. The following is a list, where applicable, of items requiring submittals.
1. Lighting fixtures
 2. Wiring Devices and Cover Plates
- J. Note that submittal review is for general construction, detailing and application only. Carefully check and verify dimensions for installation as well as clearance and service requirements before ordering equipment for the project. In addition, where an elevator(s) is involved, verify all equipment specific electrical requirements with the selected equipment supplier in order to verify breaker type, feeder sizing, etc. At completion, the entire installation shall be such that all equipment will function and be serviceable in a normal and satisfactory manner.
- K. Shop drawings will be provided by the Owner for any Owner furnished equipment requiring service or connections under this section.

- L. A complete set of shop drawings, officially marked in the prescribed manner noted previously, shall be filed on the job site. Such drawings shall be kept together, maintained in good condition and shall be readily available for reference.

13. SUPPORTING MEMBERS

- A. Furnish and install all steel angles, channels, bars or clamps required to support any type of permanent apparatus to be furnished and/or installed under this section.

14. EQUIPMENT IDENTIFICATION

- A. All cover plates shall have identification with regard to panel number, circuit number, item controlled, etc.

15. CLEAN UP

- A. All rubbish resulting from the work herein specified shall be removed from the premises as fast as it accumulates.
- B. Upon completion of the work, remove from the project site all tools, equipment, surplus materials and rubbish pertaining to the work under this contract heading. Responsibility for this shall include paying all costs for such removal and disposition including hauling, dumping, proper and legal disposal of hazardous materials, etc.
 - 1. Note that when the work on this project involves replacement of fluorescent fixtures and/or lamps, the proper disposal of these lamps shall be through an EPA authorized lamp recycling center. Prior to completion of the work the Contractor shall furnish the Owner with written documentation from the agency attesting to the fact that a specific number of lamps have, in fact, been delivered for recycling. All associated costs involved with this procedure shall be borne by the Contractor.

16. MAINTENANCE OF EXISTING FACILITIES

- A. Prior to the severing of the electrical service to any portion of the existing building, submit a plan to the Engineer and the Owner's Representative, stating the nature and duration of the proposed interruption, as well as the method of procedure. Do not under any circumstances proceed with an interruption of service of any type without the Owner's written authorization.

17. WORK IN EXISTING BUILDING

- A. All equipment shown dotted and associated wiring and conduit, etc shall be disconnected and removed.

- B. Existing electrical circuits and outlets which are to stay in use shall remain on the existing electrical panels. New work shall be connected to the new panels unless indicated otherwise.
- C. All cutting and patching of existing walls, floors and ceilings required for the installation of any and all electrical work in the remodeled portions of the existing building shall be done under this section. (See Item CUTTING AND PATCHING).
- D. All electrical work to be installed in finished rooms of the existing building shall be installed concealed unless otherwise noted on the drawings.
- E. Painting of all patched work in the existing building will be the responsibility of this Contractor.
- F. Provide coverplates on all open boxes discovered in areas being renovated.

18. TESTING, LOAD BALANCE AND ADJUSTMENT

- A. Load balancing, adjustments and electrical testing shall be done under this section of the work.
- B. A person skilled in the field of electrical testing and operating with proper test equipment shall perform the following:
 - 1. Each special system installed under this contract, shall be inspected and operationally tested by a qualified representative of the equipment vendor.
 - 2. Submit a written report of each test to the Engineer immediately following completion of the balance and test procedures.

19. RECORD DRAWINGS

- A. Keep a running record of each change and / or deviation from the drawings. This record shall be kept on two clean sets of prints used for no other purpose. The "As- Built" prints shall be available at all times during the project for review by the Owner or Engineer. Before submitting a requisition for final payment, all project modifications, changes and/or deviations must be recorded on these documents, showing the work exactly as installed.
- B. Record Drawings shall show deviations / changes with regard to the following:
 - 1. Size, type capacity, etc. of any material, device or piece of equipment.
 - 2. Location of any device or piece of equipment.
 - 3. Location of any outlet or source in building service systems.

4. Routing of any piping, conduit, ducts or other building services.
 5. Circuit Number.
 6. Schedule modifications.
- C. These sets of record drawings shall also show the location of any concealed electric service, pull boxes, raceways, conduit, etc., obtained by actual field-measured dimensions to these items from readily identifiable and accessible elements of the building such as columns, walls, etc.
- D. Record drawings must be complete and accurate. Unless they are sufficiently accurate to permit immediate location and identification of concealed work with a minimum of cutting, such drawings will be considered inadequate and the contract work deemed incomplete. If it is determined that the Contractor has made a good faith effort to compile a complete and accurate set of "As-Built" mark-ups, the Engineer will submit that, subject to the following, the Contractor has fulfilled his obligations with regard to this item of the specifications.

20. INSTRUCTIONS AND MANUALS

- A. Provide four (4) complete brochures in hard backed binders, each containing all operating, servicing, and maintenance information as well as parts lists for all equipment installed under this contract. Where diagrams are too large for the binder, arrange manila pockets with reinforced holes to hold folded drawings. The binder shall also contain a title sheet showing the Contractor's name and address and an index sheet listing the contents of the manual. A copy shall be submitted to the Engineer for verification prior to being submitted to the Owner.
- B. Information shall be complete, indexed, and bound as described above. The following shall be clearly printed on the front cover of the binder:
1. Project name, address and date.
 2. Name and address of Engineer.
 3. Section of Work covered, i.e., Electrical
 4. Name and address of Contractor.
 5. Telephone number of Contractor, including night or emergency numbers.
- C. Incorporate, within the binders, individual sections containing an index sheet, written operating instructions, shop drawings, equipment catalog cuts, manufacturer's instructions, and a list of equipment into the binders.
1. First Page - Title of Job, Owner, Address, Date of Submittal, Name of Contractor and Name of Engineer...Emergency operating instructions

and/or list of service organizations (including address and telephone numbers) capable of rendering emergency service on 24 hour calls shall be furnished.

2. Second Page - Index/Table of Contents
 3. Third Page - Introduction to First Section...This shall contain a complete written description of the system.
 4. First Section: A written description of system contents, where the system is actually located in the building, how each part functions individually and how the system works as a whole...Conclude with a list of the items requiring service and either state the service and frequency needed or refer to the manufacturer's data in the binder that describes the proper service.
 5. Second Section: A copy of each approved shop drawing, (clearly marked to identify the item furnished) with an index at the beginning of the section. Provide a separate list of all lighting fixtures and luminaires used on the job. The list shall include but not be limited to fixture type, manufacturer's catalog number and voltage, number of lamps, lamp type, ballast catalog number, manufacturer's name and quantity when required, catalog number and quantity of any replacement glass and/or plastic parts.
 6. Third Section: A copy of each manufacturer's operating instructions with an index at the beginning of the section.
 7. Fourth Section: A list of all equipment used on the job, Contractor's purchase order numbers, supplier's name and address.
- D. Arrange for technical instruction of the Owner's maintenance personnel for such time as would be reasonably required to acquaint them with their duties. In addition, deliver to the Owner all special tools or equipment required for making normal adjustments on any equipment or apparatus furnished under this contract heading.
- E. Technical instructions involving installed equipment shall include a demonstration of the equipment and/or the operating system(s) with a description of the operation explained to the owner's representatives. It shall be this Contractor's responsibility to arrange this demonstration with the Owner as well as representatives of suppliers. The demonstration shall take place after all testing and balancing and written reports of such work have been submitted to and accepted by the Engineer. The time when the satisfactory completion of this technical instruction and demonstration takes place will establish the date of final acceptance of the system and/or project unless otherwise stipulated.

21. CONTRACTORS' FOREMAN

- A. With reference to the work under this section, a competent foreman shall be assigned to the project. The foreman shall remain on the job during all normal working hours until the project is complete and shall be authorized to act as the Contractor's agent in the absence of said Contractor. This foreman shall not be relieved of his duties on the project except by permission or by request of the Engineer.

22. WARRANTIES

- A. Provide warranties to the Owner that the materials and equipment furnished are new, unless otherwise specified, and that all work is of good quality, free from faults and defects and in conformance with the Contract Documents. Unless otherwise specified, all warrants shall extend for a period of 12 months or greater as noted below. However, latent defects in materials, equipment or workmanship that are not discovered until sometime during the second year following acceptance, shall remain the contractor's responsibility to correct.
- B. Warranties on all work and equipment shall commence on the date of substantial completion of the work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion. These warranties and all related documents shall be presented in writing prior to the issuance of any Certificates. Warranties shall include equipment manufacturer's written certificates warranting the equipment furnished complies with all requirements of the drawings and specifications. This documentation shall be submitted in an appropriately marked, 3-ring hard cover binder.
- C. If, within one year after the date of substantial completion of the work or within one year after acceptance by the Owner or within such longer period of time as noted above or as may be prescribed by the terms of any applicable special warranty stipulated in the Contract Documents, any portion of the work is found to be defective, functioning improperly, or not in accordance with the Contract Documents, it shall be promptly corrected upon receipt of official notification to do so. This obligation shall survive termination of the contract.

23. PAINTING

- A. The following items of painting work shall be included in this Section:
 - 1. Equipment which has been factory finished but where the finish has become marred or rusted, shall be sanded and refinished equal to the original factory finish.
 - 2. All bare metal items or prime painted items installed as a part of this contract which have not received a factory finish (or otherwise treated to prevent rust such as galvanizing) and which is exposed to view when the building is completed shall be given one coat of primer and two coats of a good grade enamel to inhibit corrosion. This shall include such items as hangers, supports, wireways, gutters, etc., which are exposed in mechanical spaces,

closets and utility rooms. Color to be grey unless otherwise directed by Engineer and/or Owner.

3. All patched work in the existing building.

24. HOISTS, RIGGING, TRANSPORTATION AND SCAFFOLDING

- A. Provide all necessary scaffolding, staging, cribbing, tackle, hoists and rigging to locate the material, equipment, etc. of this section in its proper place on the project. All such temporary work shall be removed from the premises when no longer required.
- B. Pay all costs related to the transportation of materials and equipment to the job site. These costs shall be covered in the bid as no additional allowance will be made by the Owner.
- C. Scaffolding and hoisting equipment shall comply with requirements of all pertinent Federal, State and Local Laws and Codes.

25. EQUIPMENT PREPARATION

- A. At the completion of the job, or at such time as a portion of the work is to be turned over to the Owner, thoroughly clean all equipment installed under this section of the work. This includes switchgear, lighting fixtures, wall plates, etc. and involves the removal of all traces of grease, dirt, dust, etc., as well as temporary labels, shipping tags and the like. Equipment shall be turned over in factory inspected condition. See Item PAINTING.

26. REMOVALS, ALTERATIONS AND REUSE

- A. The demolition drawings may not show all existing walls, lighting fixtures, devices, etc. that are to be removed. Investigate the site and review all currently available drawings of the building to evaluate the work necessary to fulfill the requirements of the contract documents.
- B. Conduit:
 1. All power and system conduit no longer utilized shall be removed and disposed of.
 2. Conduit located in the permanent structure or in unaltered parts of the structure shall remain in place.
- C. Boxes:
 1. Any box located in an advantageous location and in good condition may be utilized in the new system. Close all unused openings in box.

- D. Wire:
 - 1. Wire that is removed may not be reused.
 - 2. All wire that is to be installed shall be new.
 - 3. Existing materials, equipment, lighting fixtures, devices, panelboards, conduit and wiring that is removed and not reused shall be disposed of or placed in storage as directed by the Owner's representative.

27. HAZARDOUS MATERIALS

- A. This item of the specifications has been inserted to address the potential problem or problems occurring when hazardous materials (asbestos type insulations, Askarel insulation, etc.) are encountered on a project involving work in an existing structure. Since the extent to which hazardous materials may have to be dealt with or whether, in fact, they will even be present on the site cannot always be determined prior to the actual demolition/construction phase of the project, the Contractor under this section of the work shall file a written request for inspection with the proper government agency or authority as described in the following paragraphs.
- B. Regarding contract involvement with equipment utilizing Askarel or similar substances that contain PCB (polychlorinatedbiphenyl) formulations:
 - 1. The inspection request shall be filed with the Owner and the Engineer, listing the equipment involved, its location, and other pertinent data such as size/capacity and manufacturer. A decision concerning the course of action to be taken with regard to this equipment will then be made by the Owner and will become a matter of record.

28. WIRE, CABLE AND CONNECTORS

- A. All building feeder and branch circuit wiring not specifically shown or necessarily covered by code, shall be type THHN/THWN 600 volt insulation - 75 deg. C copper conductors, complying, with NEC Standards.
- B. Any wire size not specifically noted on the plans shall be at least equal in capacity to the rating of the overcurrent device serving the item to be connected and, in addition, shall be sized in accordance with the requirements of Articles 210.19 (a) and 215.2 (b) of the N.E.C. Note that where wire sizes specifically shown on the drawings have ampacity in excess of the protection device rating, those sizes shall be the minimum provided. Wiring run from fixture junction boxes and in fixture wireways shall be 600 volt, 90 C type THHN wire or RHH.
- C. Conductors shall not be drawn into a conduit segment until that segment of the conduit system is complete, with all terminations properly bushed and with the conduit free of moisture, foreign material, etc.

- D. All connectors and lugs shall be of the solderless type and large enough to enclose all strands of the conductors with sufficient mechanical strength to withstand vibration and normal strains.
- E. All connectors for conductors sized #10 AWG and smaller shall be 3-M SCOTCHLOK, Ideal Wingnut or Buchanan B-Cap's. Connections for conductors sized #8 AWG and larger shall be made with pressure type mechanical connectors and insulated with electrical tape to 150% of the insulating value of the conductor insulation.
- F. Joints or splices in branch circuit wiring and feeders must be located as per NEC. All joints and splices shall be made electrically and mechanically sound in accordance with best practice.
- G. All parallel runs of conductors shall be cut to equal length and installed accordingly.
- H. Note that common neutrals are prohibited. An individual neutral must be provided for each circuit.
- I. Low voltage system wiring shall be sized in strict accordance with the individual equipment and/or system manufacturer's specifications and/or recommendations and shall be plenum rated when not run in conduit. In addition, the wire type utilized shall be as recommended by the equipment manufacturer. Note that where code requirements dictate, or where specified, this wiring shall be run in conduit.

29. CIRCUIT AND CONDUCTOR IDENTIFICATION

- A. All branch circuit wiring for this work shall be color coded to match existing. If branch circuit wiring for the existing facility is not color coded, consult the Owner

regarding desired color coding for this project. Each phase shall be a different color and the phase color shall be the same thruout the project including branch circuiting.
- B. All feeders and conductors not color coded shall be identified with permanent, legibly marked, self-sticking labels stating circuit number, voltage, phasing and circuit origination. Labels shall be as manufactured by W. H. Brady Co. or approved equal. Labels made by embossing machines will not be acceptable.

30. CONDUIT AND OUTLET BOXES

- A. All wiring to be installed for this project shall be enclosed in rigid or intermediate metal conduit (RMC or IMC) or electrical metallic tubing conduit (EMT).
- B. All metal conduit shall be steel and in strict accordance with applicable ANSI

standards for steel conduit. Each length shall bear the UL label.

- C. Conduit throughout shall be a minimum 3/4" size except for special connections, as detailed, and flexible runouts to fixtures, motors, etc., which may be 3/8".
- D. Unless otherwise specified, conduit imbedded in poured concrete shall be PVC. Note that generally, conduit shall not be run in concrete floor slabs except where surface mounted fixtures are indicated, cast-in-place boxes are indicated, or where specifically directed.
- E. All conduit installed on the project shall be concealed, wherever possible, unless otherwise noted or indicated on the drawings or unless permission is obtained from the Engineer to run exposed. Where conduit is exposed, it shall be run parallel or perpendicular to the building lines. (See Item MATERIALS AND WORKMANSHIP).
 - 1. Steel set screw type fittings or compression type steel couplings and connectors shall be used with EMT and may be used with IMC.
- F. All empty conduit including conduit installed under this section for others, shall be provided with solid steel pull wire or nylon pull cord.
- G. Watertight conduit expansion joints, bonding jumpers, etc., shall be provided wherever the construction dictates such devices.
- H. Conduit accessories such as outlet boxes, condulets, bends, fittings, etc., shall be manufactured by Appleton, Steel City, Russell and Stoll, Raco, Crouse Hinds or Midwest.
- I. All outlet and device boxes shall be flush mounted in areas with finished surfaces. They shall be rigidly attached to the structure by means of steel straps or channels. Boxes shall be aligned true to building lines. Listed mounting heights and dimensions shall be to the centerline of the box.

31. JUNCTION BOXES AND ACCESS DOORS

- A. Junction boxes, other than those furnished integrally with specific items of equipment or described elsewhere in the contract documents, shall be furnished and installed as required and shall be in strict accordance with NEC guidelines. Boxes shall be of minimum 12 ga. galvanized steel and shall have removable covers fastened with flat head countersunk bolts on maximum 8" centers. Note that where construction conditions dictate, junction boxes shall be watertight.
- B. Junction boxes shall be labeled to indicate circuits within. Use black permanent markers with minimum 1" letters. Such markers shall be visible from point(s) of accessibility.
- C. All boxes shall be installed in accessible locations or shall be provided with a

suitable means of access. Where other acceptable means of access is not available, provide approved access doors of the proper size and type to meet accessibility requirements for the equipment involved.

- D. Access doors in rated walls and plastered, gypsum board or similar ceilings that are rated shall be fire rated as required. They shall meet NFPA requirements and carry the UL 1-1/2 hour "B" label. Construction shall incorporate a minimum 20 ga. Steel insulated panel door, self-latching lock and continuous hinge. These doors shall be factory treated with a rust inhibitor and given a baked enamel primer.
- E. Access doors for other plastered surfaces shall be similar to Milcor Style K or L with 16 ga. steel frame and 14 ga. steel panel. A 22 ga. casing bead shall surround the frame and the unit shall be finished similar to the labeled doors.
- F. Access doors for all other construction conditions shall be all aluminum with extruded frame. Doors shall have a continuous hinge and flush latch. The units shall have a brush satin finish and shall be of a model suitable for the type of construction in which they are installed.
- G. Access doors shall be as manufactured by Acudor, Cierra, Karp, Larsen's or Milcor.

32. GROUNDING

- A. Provide a complete grounding system as required to conform to the latest standards and to comply with all pertinent articles of the N.E.C.
- B. Equipment grounding conductors shall be run with the circuit conductors and shall consist of insulated solid or stranded copper conductors. No conduit grounding methods will be permitted.
- C. All grounding system connections shall be exothermically welded. Installation shall be made in strict accordance with manufacturer's instructions, utilizing the proper mold, miscellaneous supplies, etc. for each connection. All material used, including mold, weld material, tools and accessories, shall be supplied by one manufacturer. The connection material shall be by Cadweld, Thermoweld, or approved equal.
- D. Submit, for review, a written description of the method or methods to be used for grounding and the extent of the standards being implemented, taking into account the necessity for full compliance to applicable codes, ordinances and utility company requirements.

33. SLEEVES AND THIMBLES

- A. In general, sleeves thru outside walls shall be of minimum 16 ga. galvanized metal or PVC pipe and shall be large enough to permit packing with picked oakum. The

final 3" from the inside and outside faces of the wall shall be caulked with lead or waterproof plastic.

- B. Sleeves shall be set for bus duct openings cut in masonry where required to conceal rough or irregular edges or for openings in non-masonry walls, partitions, etc. Sleeves shall be of galvanized sheet metal with flanged ends and shall be securely mounted in place. Voids between masonry and sleeve shall be filled with mortar. Openings between bus duct and structure, wall or sleeve shall be filled with a sealant as described below.
- C. Provide thimbles wherever exposed conduit, etc., pass thru interior non-masonry walls, partitions, etc. They shall be telescoping type, made from 22 ga. galvanized sheet metal and of minimum size. Thimble ends shall have cast or stamped metal plates attached thereto. Floor penetrations shall be lined with thimbles extending above the floor line.
- D. In all cases where conduit passes between floors, rated walls, and/or rated partitions, the spaces between the structure or sleeve and the penetrating member shall be provided with an approved firestop sealant to produce a fire, smoke, and water barrier. Sealant material and installation shall be as described in Item FIRESTOPPING.
- E. Individual inserts (concrete expansion anchors) shall conform to applicable requirements of Federal Specification FF-S-325. Embedment, anchor length and size shall be in accordance with manufacturer's recommendations. Anchors 3/8" thru 3/4" shall be U.L. listed for conduit hangers.
- F. Conduit penetrations of walls, floors, etc. in exposed areas shall be provided with escutcheons. They shall have concealed hinge and set screw and shall be securely attached to the conduit. In finished areas, escutcheons shall be polished brass or chrome plated steel. In mechanical or service areas, escutcheons shall be galvanized cast iron. Floor penetrations shall be provided with deep pattern floor plates set flush with the floor and designed to cover the entire sleeve projection. Note: Where required by code considerations, non-metallic sleeves shall be covered by escutcheons.
- G. Penetrations thru the roof structure shall be carefully made (see Item CUTTING AND PATCHING) and located in designated areas only. Pitch pockets shall be utilized as required to eliminate any chance of moisture penetration. They shall be made from 16 oz. sheet copper (ASTM B 370, temper H00) and shall extend approximately 4" above the finished roof.

34. FIRESTOPPING

- A. Furnish and install the required firestopping as referenced in the item of the specifications covering inserts and sleeves. Materials, installation, etc., shall be as described below. Products shall be as manufactured by Hilti Inc., Specified Technologies Inc. or United States Gypsum Co.

B. Definition:

1. Firestopping is defined as the material or combination of materials used to retain integrity of fire-rated construction by maintaining an effective barrier against the spread of flame, smoke, water and hot gases through penetrations in fire rated wall and floor assemblies.

C. Application:

1. Tested firestop systems shall be used for all penetrations for the passage of ductwork and piping through floors, fire-rated vertical barriers (walls and partitions), horizontal barriers (floor/ceiling assemblies), and vertical service shaft walls and partitions.

D. Quality Assurance:

1. A manufacturer's direct representative (not distributor or agent) shall be on site during initial installation of firestop systems to train appropriate contractor personnel in proper selection and installation procedures. This will be done per manufacturer's written recommendations published in their literature and drawing details.
2. Firestop system installations must meet requirements of ASTM E-814, UL 1479 or UL 2079 tested assemblies that provide a fire rating equal to that of construction being penetrated. In addition, proposed firestop materials and methods shall conform to applicable governing codes having jurisdiction.
3. For those firestop applications that occur for which no UL tested system is available through any manufacturer, a drawing representing the manufacturer's engineering judgment, derived from similar UL system designs or other tests, shall be submitted to local authorities having jurisdiction for review and approval prior to installation. Engineer judgment drawings must follow current requirements set forth by the International Firestop Council.

E. Submittals:

1. Manufacturer's submittals shall include specifications and technical data for each type of material including its composition and limitations, documentation of UL firestop systems to be used and manufacturer's installation instructions to comply with Section 1300. The submittal shall also include material safety data sheets as well as any engineering judgement drawings previously approved by local authorities.

F. Installer Qualifications:

1. The firestop system installer must be certified, licensed, or otherwise

qualified by the firestopping manufacturer as having the necessary experience, staff, and training to install manufacturer's products per specified requirements as previously stated in Quality Assurance.

G. Requirements:

1. All holes, voids, miscellaneous openings, etc., made by penetrations in floor slabs (above grade) for systems provided under this section shall be completely sealed to insure water tight integrity. Installation of firestopping shall be scheduled after completion of penetrating item installation but prior to covering or concealing of openings.
2. Provide firestopping utilizing components that are compatible with adjacent surfaces, the substrates forming openings, and the items penetrating the firestopping under conditions of service and application as demonstrated by the firestopping manufacturer, based on testing and field experience. Note that materials containing flammable solvents shall not be used.

H. Materials:

1. Use only firestop products that have been UL 1479, ASTM E-814, or UL 2079 tested for specific fire-rated construction conditions conforming to construction assembly type, penetrating item type, annular space requirements, and fire-rating involved for each specific application.
2. For penetrations by combustible items (penetrants consumed by high heat and flame) including insulated metal pipe that is PVC jacketed, flexible cable or cable bundles and plastic pipe (closed piping systems), an Intumescent material is required to maintain fire rating of the assembly penetrated.
3. A firestop system with an "F" rating as determined by UL 1479, ASTM E814 or UL 2079, which is equal to the time rating of the construction being penetrated, must be utilized.

I. Preparation:

1. Surfaces to which firestop materials will be applied shall be examined for detrimental conditions. They shall be free of any substances that may effect proper adhesion.
2. Observe and comply with manufacturer's recommendations for temperature and humidity conditions before, during and after installation of firestopping.

J. Installation:

1. Firestop materials shall be installed in accordance with published recommendations listed under the heading "Through-Penetration Firestop Systems" in the UL Fire Resistance Directory. In addition, the manufacturer's instructions for installation of through-penetration materials shall be strictly followed.
2. Consult with the engineer prior to installation of any UL firestop systems that might hamper the performance of fire dampers as they pertain to duct work.

K. Miscellaneous:

1. Sealed penetration areas shall be checked thoroughly to ensure proper installation before concealing or enclosing said areas.

35. WIRING DEVICES AND PLATES

A. All wiring devices shall be furnished in strict accordance with the catalog numbers listed on the drawings and here-in specified.

B. Switches:

1. Light switches shall be flush wall mounted, side and back wired design with ivory toggle. They shall be rated 20 amp - 120/277 volt AC, specification grade. Toggles shall be of high impact thermoplastic such as nylon. The following table lists acceptable manufacturers along with their appropriate catalog numbers for the various switch types.

	<u>Hubbell</u>	<u>P & S</u>	<u>A-H / Cooper</u>	<u>Bryant</u>
1-pole	1221	20AC11991	4901	
3-way	1223	20AC31993	4903	
Pilot Lt.	1221PL	20AC1-RPL	2999R	4901PL
Illum.	1221ILC	20AC1-ISL	1891IL	4901ILC

C. Receptacles, General:

1. All receptacles shall be flush wall mounted unless otherwise approved. The mounting heights are from centerline of device above finished floor. Standard mounting heights are listed on the legend and non-standard are shown on the plan.

D. Convenience Receptacle, General Purpose:

1. Receptacle shall be a duplex 20 amp, 120 volt, 3 wire grounding type. The face shall be of high impact thermoplastic such as nylon. The strap shall

wrap around the device. Ground contacts shall be mounted to the strap. An auto-ground clip shall be provided. The device shall be a Hubbell 5352-I, P & S 5362-I, A-H/Cooper 5735-1, Sierra 1462, or Bryant 5352-I.

E. GFCI Receptacle:

1. This device shall be provided where indicated on the drawings and shall be a Hubbell GF5352-I, P & S 1591-FI, A-H/Cooper GF5342-I, or Bryant GF5262R.

F. Wall Plates:

1. Provide wall plates for each device application. Standard plates shall be smooth thermoplastic such as nylon, Lexan, or glass-reinforced polyester. Unless otherwise indicated, plate color shall match the device color. All materials shall meet appropriate design and test requirements of NEMA-WD1-1974 as well as UL Plates shall be Hubbell series P, Sierra series RP, or approved equal.
2. Weatherproof covers shall be of cast aluminum or stainless steel construction. Use Hubbell WP8M "In-Use Coverplate" or approved equal.
3. Device plates shall have identification as described in item EQUIPMENT IDENTIFICATION.
4. Plates shall be attached by metal screws finished to match plate color.
5. Plates shall be installed in a vertical position, unless otherwise indicated, with an alignment tolerance of 1/32".

36. MISCELLANEOUS EQUIPMENT CONNECTIONS

- A. Various items of computer equipment will be furnished and set in place by others. This equipment, unless otherwise shown on the drawings, will be furnished with necessary electrical plugs, operating and control switches, terminations in an electrical outlet box, or equivalent electrical connector located on the equipment. This Contractor shall furnish power wiring and outlets to these various items of computer equipment.
- B. Disconnect switches shall be installed in an accessible location. Switches within finished areas, shall be located in an inconspicuous place. Under-counter installation of disconnect switches is preferred to locations above counter. However, care shall be taken that such switches will be accessible and that their location does not interfere with the installation of equipment.
- C. Roughing-in drawings for equipment shall be obtained from the other

Contractors, etc. through the Engineer as the time approaches when such equipment is required. (Allow a reasonable period from the time of notice to secure this information.)

37. TEMPORARY SERVICE FOR CONSTRUCTION

- A. Utilize existing facilities for temporary power. Coordinate with Owner's representative prior to use of any existing facilities.
- B. Contractors on the project will provide their own electrical cords and plugs up to a capacity of 20 amperes. However, services for larger items of equipment and for welding machines shall be provided, as requested, under this section of the work. Reimbursement will be made by the contractor requesting such service.
- C. Upon completion of the project, the disconnecting of all temporary circuits and the removal of all temporary wiring from the permanent system shall be done under this section of the work. The continuation of the warranty for the system, or any part thereof, shall not be affected by the foregoing.

38. DIGITAL, ADDRESSABLE FIRE-ALARM SYSTEM

PART 1 - GENERAL

1.1 SUMMARY

- A. This section covers fire alarm systems, including initiating devices, notification appliances, controls and supervisory devices.
- B. Work covered by this section includes the furnishing of labor, equipment and materials for installation of the fire alarm system as indicated on the drawings and specifications.
- C. The Fire Alarm System shall consist of all necessary hardware equipment and software programming to perform the following functions:
 - 1. Fire alarm and detection operations.
 - 2. Control and monitoring of elevators, smoke control equipment, door hold-open devices, fire suppression systems, emergency power systems and other equipment as indicated in the drawings and specifications.
 - 3. One-way supervised automatic voice alarm operations.

1.2 Acceptable Manufacturer

- A. Manufacturer: The equipment and service described in this specification are those supplied and supported by Notifier (Premier Distributor) or equal by Johnson Controls, Siemens or EST.
- B. Provide main panel equal to Notifier NFS2-3030.

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- C. Equipment manufacturer shall have a service organization within 60 miles of the project site. All equipment and materials necessary for proper operation of the system shall be deemed part of these specifications even if not specifically listed or described in this document.

1.3 Related Documents

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Divisions 1 and 26 Specification Sections, apply to this section.
- B. The work covered in this section is to be coordinated with related work as specified elsewhere in the specifications. Requirements of the following sections apply:
 - 1. Division 16000: "Electrical."
- C. The system and all associated operations shall be in accordance with the following:
 - 1. Guidelines of the following Building Code: BOCA
 - 2. NFPA 72, National Fire Alarm Code
 - 3. NFPA 70, National Electrical Code
 - 4. Other applicable NFPA standards
 - 5. Local Jurisdictional Adopted Codes and Standards
 - 6. ADA Accessibility Guidelines

1.4 System Description

- A. General: Provide a complete, non-coded, addressable microprocessor-based fire alarm system with initiating devices, notification appliances, and monitoring and control devices as indicated on the drawings and as specified herein.
- B. Software: The fire alarm system shall allow for loading and editing instructions and operating sequences as necessary. The system shall be capable of on-site programming to accommodate system expansion and facilitate changes in operation. All software operations shall be stored in a non-volatile programmable memory within the fire alarm control unit. Loss of primary and secondary power shall not erase the instructions stored in memory. System shall run an internal checks it to detect any program anomalies. Panel shall be capable of full system operation during a new configuration download.
- C. History Logs: the system shall provide a means to recall alarms and trouble conditions in chronological order for the purpose of recreating an event history. A separate alarm and trouble log shall be provided.
- D. Wiring/Signal Transmission:

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1. Transmission shall be hardwired, using separate individual circuits for each zone of alarm operation as required or addressable signal transmission, dedicated to fire alarm service only.
 2. System connections for initiating circuits and notification appliance circuits shall be Class B.
 3. Circuit Supervision: Circuit faults shall be indicated by a trouble signal at the FACP. Provide a distinctive indicating audible tone and alphanumeric annunciation.
- E. Remote Access:
1. FACP shall have the capability to provide remote access thru a dial-up service modem using the public switched telephone system or a private switched telephone system.
 2. A personal computer or laptop, configured with terminal emulation software shall have the ability to access the fire alarm control panel for diagnostics, maintenance reporting or information gathering.
 3. FACP shall have the capability to provide Remote Access through a listed internet interface via a standard Web browser user interface
- F. Required Functions:
1. Priority of Signals: Alarm events have the highest priority. Subsequent alarm events are queued in the order received and do not affect existing alarm conditions. Priority Two, Supervisory and Trouble events have second, third and fourth level priority respectively. Signals of a higher-level priority take precedence over signals of lower priority even if the lower-priority condition occurs first. Annunciate all events regardless of priority or order received.
 2. Non-interfering: An event on one zone does not prevent the receipt of signals from any other zone. All zones are manually resettable from the FACP after the initiating device or devices are restored to normal. The activation of an addressable device does not prevent the receipt of signals from subsequent activations.
 3. Transmission to remote receiving station: automatically route alarm, supervisory and trouble signals to existing remote central station.
 4. Annunciation: Operation of alarm and supervisory initiating devices shall be annunciated at the FACP and shall indicate the location and type of device.
 5. General Alarm: A system general alarm shall include:
 - a) Indication of alarm condition at the FACP.

- b) Identification of the device or zone that is the source of the alarm at the FACP.
 - c) Operation of audible and visible notification devices throughout the building until silenced at FACP.
 - d) Initiation of elevator recall in accordance with ASME/ANSI A17.1, when specified detectors or sensors are activated.
6. Apartment alarm:
- a) A smoke detector inside an apartment sets off a local alarm, including all rooms in each suite, and annunciates at the main fire alarm control panel. Alarm condition inside an apartment sounds individual room alarm only including all rooms in each suite. Alarm shall not activate building signaling appliance.
 - b) Once the smoke enters a common/public area then the building alarms shall go off.
 - c) If any sprinkler in the building goes off or a pull station is activated, the building alarms will go into alarm.
7. Supervisory Operations: Upon activation of a supervisory device such as fire pump power failure, low air pressure switch and tamper switch, the system shall operate as follows:
- a) Activate the system supervisory service audible signal and illuminate the LED (display) at the control unit.
 - b) Pressing the Supervisory Acknowledge Key will silence the supervisory audible signal while maintaining the Supervisory LED “on” indicating abnormal condition.
 - c) Record the event in the FACP historical log.
 - d) Transmission of supervisory signal to the remote receiving station.
 - e) Restoring the condition shall cause the Supervisory LED to clear and restore the system to normal.
8. Alarm Silencing: If the “Alarm Silence” button is pressed, all audible and visual devices shall cease operation.
9. System Reset:

- a) The “system Reset” button shall be used to return the system to its normal state. Display messages shall provide operator assurance of the sequential steps (“IN PROGRESS”, “RESET COMPLETED”) as they occur. The system shall verify all circuits or devices are restored prior to resetting the system to avoid the potential for re-arming the system. The display message shall indicate “ALARM PRESENT, SYSTEM RESET ABORTED.”
 - b) Should an alarm condition continue, the system will remain in an alarmed state.
10. A manual evacuation switch shall be provided to operate the notification appliances without causing other control circuits to be activated.
11. Walktest: the system shall have the capacity of eight (8) programmable, pass-code protected, one person testing groups, such that only a portion of the system need be disabled during testing. The actuation of the “enable one person test” program at the control unit shall activate the “One Person Testing” mode of the system as follows:
 - a) The city circuit connection and suppression release circuits shall be bypassed for the testing group.
 - b) Control relay functions associated to one of the 8 testing groups shall be bypassed.
 - c) The control unit shall indicate a trouble condition.
 - d) The alarm activation of any initiation device in the testing group shall cause the audible notification appliances to sound a voice announcement to identify the device or zone.
 - e) The unit shall automatically reset after signaling is complete.
 - f) Any momentary opening of an initiating or notification appliance circuit wiring shall cause the audible signals to voice announce the trouble condition.
12. Automatic Voice Evacuation Sequence:
 - a) The audio alarm signal shall consist of an alarm tone for a maximum of 5 seconds followed by an automatic digital voice message. At the end of the voice message, the alarm tone shall repeat.
 - b) All audio operations shall be activated by the system software so that any required future changes can be facilitated by authorized

personnel without any component rewiring or hardware additions.

G. Analog Smoke Sensors:

1. **Monitoring:** The FACP shall individually monitor sensors for calibration, sensitivity and alarm condition, and shall individually adjust for sensitivity. The control unit shall determine the condition of each sensor by comparing the sensor value to the stored values.
2. **Environmental Compensation:** The FACP shall maintain a moving average of the sensor's smoke chamber value to automatically compensate for dust, dirt and other conditions that could affect detection operations.
3. **Programmable Sensitivity:** Photoelectric Smoke Sensors shall have 7 sensitivity levels ranging from 0.2% to 3.7%, programmed and monitored from the FACP.
4. **Sensitivity Testing Reports:** The FACP shall provide sensor reports that meet NFPA 72 calibrated test method requirements. The reports shall be viewed on a display monitor or printed for annual recording and logging of the calibration maintenance schedule.
5. The FACP shall automatically indicate when an individual sensor needs cleaning. The system shall provide a means to indicate that sensor requires cleaning. When a sensor's average value reaches a predetermined value, (3) progressive levels of reporting are provided. The first level shall indicate that a sensor is close to a trouble reporting condition and will be indicated on the FACP as "ALMOST DIRTY." If this indicator is ignored, a second level "DIRTY SENSOR" condition shall be indicated at the FACP. The sensor base LED shall glow steady giving a visible indication at the sensor location. The "DIRTY SENSOR" condition shall not affect the sensitivity level required to alarm the sensor. If a "DIRTY SENSOR" is left unattended and its average value increases to a third predetermined value, an "EXCESSIVELY DIRTY SENSOR" trouble condition shall be indicated at the control unit.
6. The FACP shall continuously perform an automatic self-test on each sensor, which will check sensor electronics to ensure the accuracy of the values being transmitted. Any sensor that fails this test shall indicate a "SELF TEST ABNORMAL" trouble condition.
7. Multi-Sensors shall combine photoelectric smoke sensing and heat sensing technologies. An alarm shall be determined by either smoke detection, with selectable sensitivity from 0.2 to 3.7 %/ft obscuration; or heat detection, selectable as fixed temperature or fixed with selectable rate-of-rise; or based on an analysis of the combination of smoke and heat activity.
8. Programmable bases. It shall be possible to program relay and sounder bases to operate independently of their associated sensor.

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9. Magnet test activation of smoke sensors shall be distinguished by its label and history log entry as being activated by a magnet.
- H. Speaker: Speaker notification appliances shall be listed to UL 1480.
1. The speaker shall operate on a standard 70.7V RMS NAC using twisted/shielded wire.
 2. The following taps are available: 0.25W, 0.5W, 1.0W and 2.0W. At the 1.0W tap, the speaker shall have a minimum UL rated sound pressure level of 84 dBA at 10 feet.
 3. The speaker shall have a frequency response of 400 to 4000 Hz for fire alarm and 125 to 12 kHz for general signaling.
- I. Manual Voice Paging
1. The system shall be configured to allow voice paging. Upon activation of any speaker manual control switch, the alarm tone shall be sounded over all speakers in that group.
 2. The control panel operator shall be able to make announcements via the push-to-talk paging microphone over the pre-selected speakers.
 3. Features for total building paging shall be accomplished by the means of an “All Call” switch.
- J. Fire Suppression Monitoring:
1. Water flow: Activation of a water flow switch shall initiate general alarm operations.
 2. Sprinkler valve tamper switch: The activation of any valve tamper switch shall activate system supervisory operations.
 3. WSO: Water flow switch and sprinkler valve tamper switch shall be capable of existing on the same initiating zone. Activation of either device shall distinctly report which device is in alarm on the initiating zone.
- K. Power Requirements:
1. The control unit shall receive AC power via a dedicated emergency circuit.
 2. The system shall be provided with sufficient battery capacity to operate the entire system upon loss of normal AC power in a normal supervisory mode for a period of 24 hours with 15 minutes of alarm operation at the end of this period. The system shall automatically transfer to battery standby upon power failure. All battery charging and recharging operations shall be automatic.

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3. All circuits requiring system-operating power shall be 24 VDC and shall be individually fused at the control unit.
4. The incoming power to the system shall be supervised so that any power failure will be indicated at the control unit. A green “power on” LED shall be displayed continuously while incoming power is present.
5. The system batteries shall be supervised so that a low battery or depleted battery condition or disconnection of the battery shall be indicated at the control unit and displayed for the specific fault type.
6. The system shall support NAC Lockout feature to prevent subsequent activation of NA Circuits after a depleted battery condition occurs in order to make use of battery reserve for front panel annunciation and control.
7. The system shall support 100% of addressable devices in alarm or operated at the same time, under both primary (AC) and secondary (battery) power conditions.
8. Loss of primary power shall sound a trouble signal at the FACP. The FACP shall indicate when the system is operating on an alternate (battery or generator) power supply.

1.5 Submittals

- A. General: Submit the following according to conditions of contract and Divisions 1, 26 and 28 Specifications sections.
 1. Product data sheets for system components highlighted or marked to indicate the specific products, features or functions required to meet this specification. Alternate or as-equal products submitted under this contract must provide a detailed line-by-line comparison of how the submitted product meets, exceeds or does not comply with this specification.
 2. Wiring diagrams from Manufacturer’s Vendor.
 3. Shop drawings showing system details including location of FACP, all devices, circuiting and details.
 4. System power and battery charts with performance graphs and voltage drop calculations to assure that the system will operate per the prescribed backup time periods and under all voltage conditions per UL and NFPA standards.
 5. System operation description including method of operation and supervision of each type of circuit and sequence of operations for all manually and automatically initiated system inputs and outputs. A list of all input and output points in the system shall be provided with a label indicating location or use of IDC, NAC, relay, sensor and auxiliary control circuits.

6. Operating instructions for FACP.
 7. Operation and maintenance data for inclusion in Operating and Maintenance Manual. Include data for each type of product, including all features and operating sequences, both automatic and manual. Provide the names, addresses and telephone numbers of service organizations.
 8. Product certification signed by the manufacturer of the fire alarm system components certifying that their products comply with specified requirements.
 9. Record of field tests of system.
- B. Submission to Authority Having Jurisdiction: In addition to routine submission of the above material, make an identical submission to the authority having jurisdiction. Include copies of shop drawings as required to depict component locations to facilitate review. Upon receipt of comments from the Authority, make resubmissions if required to make clarifications or revisions to obtain approval.
- 1.6 Quality Assurance
- A. Installer Qualifications: A factory authorized installer with the appropriate NICET level certification for installation is required to perform the work of this section.
 - B. Each and all items of the Fire Alarm System shall be listed as a product of a single fire alarm system manufacturer under the appropriate category by UL Inc. and shall bear the UL label.
- 1.7 Extra Materials
- A. General: Furnish extra materials, packaged with protective covering for storage and identified with labels clearly describing contents as follows:
 1. Strobe units: Furnish quantity equal to ten (10) percent of the number of units installed, but not less than one (1).
 2. Smoke Detectors or Sensors: Furnish quantity equal to ten (10) percent of the number installed, but not less than one (1) of each type.
 3. Detector or Sensor Base(s): Furnish quantity equal to two (2) percent of the number of units of each type installed but not less than one (1) of each type.

PART 2 - PRODUCTS

2.1 Fire Alarm Control Panel (FACP)

- A. General: Comply with UL 864, "Control Units for Fire-Protective Signaling Systems."
- B. The following FACP hardware shall be provided:

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1. Power limited base panel with beige cabinet and door, 120VAC input power.
 2. 2,000 point capacity where (1) point equals (1) monitor (input) or (1) control (output).
 3. 2,000 points of Network Annunciation at FACP display when applied as a Network Node.
 4. 2,000 points of annunciation where one (1) point of annunciation equals:
 - a) 1 LED driver output on a graphic driver or 1 switch input on a graphic switch input module.
 - b) 1 LED on panel or 1 switch on panel.
 5. Municipal City Circuit Connection with disconnect switch, 24 VDC Remote Station, local energy.
 6. One auxiliary electronically resettable fused 2A @ 24 VDC, programmable as a trouble relay, either as normally energized or as an auxiliary control.
 7. One auxiliary relay, SPDT 2A @ 32 VDC, programmable as a trouble relay, either as normally energized or de-energized, or as an auxiliary control.
 8. Where required, provide intelligent remote battery charger for charging up to 110Ah batteries.
 9. Power supplies with integral intelligent Notification Appliance Circuit, Class B, for system expansion.
 10. Four (4) form "C" Auxiliary Relay Circuits (form C contacts rated 2A @ 24 VDC. Resistive), operation is programmable for trouble, alarm, supervisory of other fire response functions. Relays shall be capable of switching up to 1/2A @ 120 VAC, inductive.
 11. The FACP shall support six (6) RS-232-C ports and one (1) service port.
 12. Remote Unit Interface: Supervised serial communication channel for control and monitoring of remotely located I/O panels.
- C. Cabinet: Lockable steel enclosure. Arrange unit so all operations required for testing or for normal care and maintenance of the system are performed from the front of the enclosure. If more than a single unit is required to form a complete control unit, provide exactly matching modular unit enclosures.
- D. Alphanumeric Display and System Controls: Panel shall include an 80 character LCD display to indicate alarm, supervisory and component status messages and shall include a keypad for use in entering and executing control commands.

- E. Voice Alarm: Provide an emergency communication system, integral with the FACP, including voice alarm system components, microphones, amplifiers and tone generators. Features include:
 - 1. Amplifiers comply with UL 1771, "Amplifiers for Fire Protective Signaling Systems." Amplifiers shall provide an onboard local mode temporal coded horn tone as a default backup tone. Test switches on the amplifier shall be provided to test and observe amplifier backup switchover. Each amplifier shall communicate to the host panel amplifier and NAC circuit voltage and current levels for display on the user interface.
 - 2. All announcements are made over dedicated, supervised communication lines. Sleeping areas shall sound the 520 Hz low frequency tone. All risers shall support Class B wiring for each audio channel.
 - 3. Emergency voice communication audio controller module shall provide up to 8 minutes of message memory for digitally stored messages. Provide supervised connections for master microphone and up to 5 remote microphones.
 - 4. Status annunciator indicating the status of the various voice alarm speaker zones and the status of fire fighter telephone two-way communication zones.
 - 5. Amplifiers shall be installed in three (3) ventilated equipment backboxes similar to Notifier ONYX Series EQ Cabinet.
- F. Distributed Module Operation: FACP shall be capable of allowing remote location of the following modules; interface of such modules shall be through a Style 4 (Class B) supervised serial communications channel (SLC):
 - 1. Amplifiers, voice and telephone control circuits.
 - 2. Addressable Signaling Line Circuits.
 - 3. Initiating Device Circuits.
 - 4. Notification Appliance Circuits.
 - 5. Auxiliary Control Circuits.
- G. Fire Alarm Control Unit shall be capable of operating remote printer's; output shall be ASCII from an RS-232-C connection with an adjustable baud rate.

2.2 Emergency Power Supply

- A. General: Components include battery, charger and an automatic transfer switch.
- B. Battery: Sealed lead-acid. Provide sufficient capacity to operate the complete alarm system in normal or supervisory (non-alarm) mode for a period of 24 hours. Following

this period of operation on battery power, the battery shall have sufficient capacity to operate all components of the system, including all alarm indicating devices in alarm or supervisory mode for a period of 15 minutes.

2.3 Addressable Manual Pull Stations (Notifier NBG-12LX)

- A. Description: Addressable single-action type, red LEXAN with molded, raised-letter operating instructions of contrasting color. Station will mechanically latch upon operation and remain so until manually reset by opening with a key common with the control units.

2.4 Smoke Sensors (Notifier FSP-951)

- A. General: Comply with UL 268, "Smoke Detectors for Fire Protective Signaling Systems." Include the following features:
 1. Factory Nameplate: Serial number and type identification.
 2. Operating Voltage: 24 VDC, nominal.
 3. Self-Restoring: Detectors do not require resetting or readjustment after actuation to restore normal operation.
 4. Plug-in Arrangement: Sensor and associated electronic components are mounted in a module that connects to a fixed base with a twist-locking plug connection. Base shall provide break-off plastic tab that can be removed to engage the head/base locking mechanism. No special tools shall be required to remove head once it has been locked. Removal of the detector head shall interrupt the supervisory circuit of the fire alarm detection loop and cause a trouble signal at the control unit.
 5. Each sensor base shall contain an LED that will flash each time it is scanned by the control unit (once every 4 seconds). In an alarm condition, the sensor base LED shall be on steady.
 6. Each sensor base shall contain a magnetically actuated test switch to provide for easy alarm testing at the sensor location.
 7. Each sensor shall be scanned by the Control Unit for its type identification to prevent inadvertent substitution of another sensor type. Upon detection of a "wrong device", the control unit shall operate with the installed device at the default alarm settings for that sensor; 2.5% obscuration for photoelectric sensor, 135-deg F and 15-deg F rate-of-rise for the heat sensor, but shall indicate a "Wrong Device" trouble condition.
 8. The sensor's electronics shall be immune from false alarms caused by EMI and RFI.
 9. Sensors include a communication transmitter and receiver in the mounting base having a unique identification and capability for status reporting to the FACP.

Sensor address shall be located in base to eliminate false addressing when replacing sensors.

10. Removal of the sensor head for cleaning shall not require the setting of the addresses.
- B. Type: Smoke sensors shall be of the photoelectric or combination photoelectric/heat type. Where acceptable per manufacturer specifications, ionization type sensors may be used.
 - C. Sounder Bases: sounder bases (520 Hz low frequency) are supported alternatives to the standard base. (Notifier B200S-LF-WH).
 - D. Duct Smoke Sensor: Photoelectric type, with sampling tube of design and dimensions as recommended by the manufacturer for the specific size and installation conditions where applied. Sensor includes relay as required for fan shutdown. (Notifier FSP-951R).
 1. Environmental compensation, programmable sensitivity settings, status testing and monitoring of sensor dirt accumulation for the duct sensor shall be provided by the FACP.
 2. The duct Housing shall provide a supervised relay driver circuit for driving up to 15 relays with a single "Form C" contact rated at 7A @ 28 VDC or 10A @ 120 VAC. This auxiliary relay output shall be fully programmable. Relay shall be mounted within 3 feet of HVAC control circuit.
 3. Duct Housing shall provide a relay control trouble indicator Yellow LED. (Notifier DNR).
 4. Compact Duct Housing shall have a transparent cover to monitor for the presence of smoke. Cover shall secure to housing by means of four (4) captive fastening screws.
 5. Duct Housing shall provide two (2) Test Ports for measuring airflow and for testing. These ports will allow aerosol injection in order to test the activation of the duct smoke sensor.
 6. Duct Housing shall provide a magnetic test area and Red sensor status LED.
 7. For maintenance purposes, it shall be possible to clean the duct housing sampling tubes by accessing them through the duct housing front cover.
 8. Each duct sensor shall have a Remote Test Station with an alarm LED and test switch (Notifier RTS-151).
 9. Where indicated, a NEMA 4X weatherproof duct housing enclosure shall provide for the circulation of conditioned air around the internally mounted addressable duct sensor housing to maintain the sensor housing at its rated temperature range. The housing shall be UL Listed to Standard 268A.

2.5 Heat Sensors (Notifier FST-951)

- A. Thermal Sensor: Combination fixed-temperature and rate-of-rise unit with plug-in base and alarm indication lamp; 135-deg F fixed-temperature setting except as indicated.
- B. Thermal sensor shall be of the epoxy encapsulated electronic design it shall be thermistor based, rate-compensated, self-restoring and shall not be affected by thermal lag.
- C. Sensor fixed-temperature sensing shall be independent of rate-of-rise sensing and programmable to operate at 135-deg F or 155-deg F. Sensor rate-of-rise temperature detection shall be selectable at the FACP for either 15-deg F or 20-deg F per minute.
- D. Sensor shall have the capability to be programmed as a utility monitoring device to monitor for temperature extremes in the range from 32-deg F to 155-deg F.

2.6 Addressable Circuit Interface Modules (Notifier FMM-101)

- A. Addressable Circuit Interface Modules: Arrange to monitor one or more system components that are not otherwise equipped for addressable communication. Modules shall be used for monitoring of waterflow, valve tamper, non-addressable devices and for control of evacuation indicating appliances and HVAC systems.
- B. Addressable Circuit Interface Modules will be capable of mounting in a standard electric outlet box. Modules will include cover plates to allow surface or flush mounting. Modules will receive their operating power from the signaling line or a separate two-wire pair running from an appropriate power supply as required. (Notifier FCM-1).
- C. There shall be the following types of modules:
 - 1. Type 1: Monitor Circuit Interface Module:
 - a) For conventional 2-wire smoke detector and/or contact device monitoring with Class B wiring supervision. The supervision of the zone will be Class B. This module will communicate status (normal, alarm, trouble) to FACP.
 - b) For conventional 4-wire smoke detector with Class B wiring supervision. The module will provide detector reset capability and over-current power protection for the 4-wire detector. This module will communicate status (normal, alarm, trouble) to the FACP.
 - 2. Type 2: Line Powered Monitor Circuit Interface Module:
 - a) This type of module is an individually addressable module that has both its power and its communications supplied by the 2-wire multiplexing signaling line circuit. It provides location specific addressability to an initiating device by monitoring normally open dry contacts. This module shall have the capability of communicating four zone status conditions (normal, alarm, current limited, trouble) to the FACP.

- b) This module shall provide location specific addressability for up to five initiating devices by monitoring normally closed or normally open dry contact security devices. The module shall communicate four zone status conditions (open, normal, abnormal and short). The 2-wire signaling line circuit shall supply power and communications to the module.

3. Type 3: Single Address Multi-Point Interface Modules:

This multipoint module shall provide location specific addressability for four initiating circuits and control two output relays from a single address. Inputs shall provide supervised monitoring of normally open, dry contacts and be capable of communicating four zone status conditions (normal, open, current limited and short). The input circuits and output relay operation shall be controlled independently and disabled separately.

- a) This dual point module shall provide a supervised multi-state input and a relay output, using a single address. The input shall provide supervised monitoring of two normally open, dry contacts with a single point and be capable of communicating four zone status conditions (normal, open, current limited and short). The 2-wire signaling line circuit shall supply power and communications to the module.
- b) This dual point module shall monitor an unsupervised normally open, dry contact with one point and control an output relay with the other point, using a single address. The 2-wire signaling line circuit shall supply power and communications to the module.

4. Type 4: Line Powered Control Circuit Interface Module:

- a) This module shall provide control and status tracking of a Form "C" contact. The 2-wire signaling line circuit shall supply power and communications to the module.

5. Type 5: 4-20 mA Analog Monitor Circuit Interface Module:

- a) This module shall communicate the status of a compatible 4-20 mA sensor to the FACP. The FACP shall annunciate up to three threshold levels, each with custom action message; display and archive actual sensor analog levels; and permit sensor calibration date recording.

- D. All circuit interface modules shall be supervised and uniquely identified by the control unit. Module identification shall be transmitted to the control unit for processing according to the program instructions. Modules shall have an on-board LED to provide an indication that the module is powered and communicating with the FACP. The LED's shall provide a troubleshooting aid since the LED blinks on poll whenever the peripheral is powered and communicating.

2.7 Magnetic Door Holders

- A. Description: Units shall be listed to UL 228. Units are equipped for wall or floor mounting as indicated and are complete with matching door plate. Unit shall operate from a 120 VAC source and develop a minimum of 25 lbs. holding force.
- B. Material and Finish: Match door hardware.

2.8 Elevator Recall:

- A. Smoke detectors will be installed in the elevator hoist shaft. An alarm from such devices will signal the elevator to initiate emergency procedures. All lift call buttons; door buttons and signals will become inoperative in the lift bank serving the machine room. Lifts will immediately be sent to the main floor of egress (ground level) where they will be decommissioned until the alarm condition has been cleared or manually taken over by Fire Department personnel.
- B. Smoke detectors will be installed in each elevator lobby. These detectors will function to signal the elevator to recall to the primary floor of egress (ground level) in the event of an alarm. Detectors on the first floor will signal the elevator to recall to the secondary floor of egress.

2.9 Standard Alarm Notification Appliances

- A. Visible/Only: Strobe shall be listed to UL 1971. The V/O shall consist of a xenon flash tube and associated lens/reflector system. The V/O enclosure shall mount directly to standard single gang, double gang or 4" square electrical box, without the use of special adapters or trim rings. Provide a label inside the strobe lens to indicate the candela rating setting of the specific appliance.
- B. Speaker/Visible: Combination Speaker/Visible (S/V) units combine the speaker and visible functions into a common housing. The S/V shall be listed to UL 1971 and UL 1480. (System Sensor L Series speaker strobes).
 - 1. Twisted/shielded wire is required for speaker connections on a standard 25 or 70 VRMS.
 - 2. The following taps are available: 0.25W, 0.50W, 1.0W and 2.0W. At the 1.0W tap, the speaker shall have a minimum UL rated SPL of 84 dBA at 10 feet.
 - 3. The speaker shall have a frequency response of 400 to 4000 Hz for Fire Alarm and 125 to 12 kHz for General Signaling.
 - 4. The S/V shall install directly to a 4" square, 2 1/8 in. deep electrical box.
- C. Notification Appliance Circuit provides synchronization of strobes at a rate of 1Hz. The capability to synchronize multiple notification appliance circuits shall be provided.

- D. Accessories: The contractor shall furnish the necessary accessories.

2.10 NAC Power Extender (Notifier HPF-PS10B)

- A. The IDNet NAC Power Extender panel shall be a stand-alone panel capable of powering a minimum of 4 notification appliance circuits. Notification appliance circuits shall be Class B Style Y rated at 2 amps each.
- B. The internal power supply and battery charger shall be capable of charging up to 18 Ah batteries internally mounted.
- C. The NAC extender panel may be mounted close to the host control panel or can be remotely located. The IDNet Addressable NAC Extender Panel, when connected to an addressable panel, shall connect to the host panel via an IDNet communications channel. Via the IDNet channel, each output NAC can be individually controlled for general alarm or selective area notification.
- D. For IDNet connected NAC extender panels, up to five (5) panels can be connected on a single IDNet channel.
- E. When connected to a conventional (non-addressable) panel, one or two standard notification appliance circuits from the main control panel may be used to activate all the circuits on the NAC power extender panel.
- F. Alarms from the host fire panel shall signal the NAC power extender panel to activate. The panel shall monitor itself and each of its NACs for trouble conditions and shall report trouble conditions to the host panel.

PART 3 - EXECUTION

3.1 Installation, General

- A. Install system components and all associated devices in accordance with applicable NFPA Standards and manufacturer's recommendations.
- B. Installation personnel shall be supervised by persons who are qualified and experienced in the installation, inspection and testing of fire alarm systems. Examples of qualified personnel shall include, but not be limited to, the following:
 1. Factory trained and certified personnel.
 2. National Institute of Certification in Engineering Technologies (NICET) fire alarm level II certified personnel.
 3. Personnel licensed or certified by state or local authority.

3.2 Equipment Installation

- A. Furnish and install a complete Fire Alarm System as described herein and as shown on the plans. Include sufficient control unit(s), manual stations, automatic fire detectors, smoke detectors, audible and visible notification appliances, wiring, terminations, electrical boxes and all other necessary material for a complete operating system.
- B. Existing Fire Alarm Equipment, where applicable, shall be maintained fully operational until the new equipment has been tested and accepted.
- C. Equipment Removal: After acceptance of the new fire alarm system, disconnect and remove the existing fire alarm equipment and restore damaged surfaces. Remove from the site and legally dispose of the remainder of the existing material.
- D. Water-Flow and Valve Supervisory Switches: Connect for each sprinkler valve required to be supervised.
- E. Device Location-Indicating Lights: Locate in the public space immediately adjacent to the device they monitor.

3.3 Wiring Installation

- A. System Wiring: Wire and cable shall be a type listed for its intended use by an approval agency acceptable to the Authority Having Jurisdiction (AHJ) and shall be installed in accordance with the appropriate articles from the current approved edition of NFPA 70: National Electrical Code (NEC).
- B. Contractor shall obtain from the Fire Alarm System Manufacturer written instruction regarding the appropriate wire/cable to be used for this installation. No deviation from the written instruction shall be made by the Contractor without the prior written approval of the Fire Alarm System Manufacturer.
- C. Color Coding: Color code fire alarm conductors differently from the normal building power wiring. Use one color code for alarm initiating device circuit wiring and a different color code for supervisory circuits. Color code notification appliance circuits differently from alarm initiating circuits. Paint fire alarm system junction boxes, conduit fittings and box covers red.

3.4 Field Quality Control

- A. Manufacturer's Field Services: Provide services of a factory-authorized service representative to supervise the field assembly and connection of components and the pre-testing, testing and adjustment of the system.
- B. Service personnel shall be qualified and experienced in the inspection, testing and maintenance of fire alarm systems. Examples of qualified personnel shall be permitted to include, but shall not be limited to, individuals with the following qualifications:

1. Factory trained and certified personnel.
 2. National Institute of Certification in Engineering Technologies (NICET) fire alarm certified.
 3. International Municipal Signal Association (IMSA) fire alarm certified.
 4. Certified by state or local authority.
 5. Trained and qualified personnel employed by an organization listed by a national testing laboratory for the servicing of fire alarm systems.
- C. Pre-testing: Determine, through pre-testing, the conformance of the system to the requirements of the Drawings and Specifications. Correct deficiencies observed in pre-testing. Replace malfunctioning or damaged items with new and retest until satisfactory performance and conditions are achieved.
- D. Final Test Notice: Provide a 10-day minimum notice in writing when the system is ready for final acceptance testing.
- E. Minimum System Tests: Test the system according to the procedures outlined in NFPA 72.
- F. Retesting: Correct deficiencies indicated by tests and completely retest work affected by such deficiencies. Verify by the system test that the total system meets the Specifications and complies with applicable standards.
- G. Report of Tests and Inspections: Provide a written record of inspections, tests and detailed test results in the form of a test log.
- H. Final Test, Certificate of Completion and Certificate of Occupancy:
1. Test the system as required by the Authority Having Jurisdiction (AHJ) in order to obtain a certificate of occupancy.
- 3.5 Cleaning and Adjusting
- A. Cleaning: Remove paint splatters and other spots, dirt and debris. Clean unit internally using methods and materials recommended by manufacturer.
- B. Occupancy Adjustments: When requested within one year of date of Substantial Completion, provide on-site assistance in adjusting sound levels and adjusting controls and sensitivities to suit actual occupied conditions. Test fire-alarm system for compliance with visual and testing inspection requirements in NFPA 72. Use forms developed for initial tests and inspections. Provide up to three (3) visits to the site for this purpose.

3.6 Training

- A. Provide the services of a factory-authorized service representative to demonstrate the system and train Owner's maintenance personnel 4 hour training on-site.
 - A. A smoke detector inside an apartment sets off a local alarm, including all rooms in each suite, and annunciates at the main fire alarm control panel. Alarm condition inside an apartment sounds individual room alarm only including all rooms in each suite. Alarm shall not activate building signaling appliance.
 - B. Once the smoke enters a common/public area then the building alarms shall go off.
 - C. If any sprinkler in the building goes off or a pull station is activated, the building alarms will go into alarm.

* * * END OF SECTION * * *