

# Bay City Public Schools

## PROJECT MANUAL



2024 Sinking Fund  
Bid Pack 11  
Eastern HS at Handy MS

February 9, 2024

---

#### ARCHITECTS/ENGINEERS

WTA Architects  
100 S Jefferson Ave Ste 601  
Saginaw MI 48607  
Telephone: 989-752-8107  
Fax: 989-752-3125



WTA ARCHITECTS

#### CONSTRUCTION MANAGER

Wolgast Corporation  
4835 Towne Centre Road, Suite 203  
Saginaw, Michigan 48604  
Telephone: (989) 790-9120  
Fax: (989) 790-9063



**Bidding Requirements, Contract Forms, and Conditions of the Contract**

00005 – Index  
00010 – Notice to Bidders  
00100 – Instructions to Bidders  
00300 – Instructions – Proposals/Bid Division Descriptions  
00305 – Proposal Form  
00306 – Familial Relationship Affidavit  
00307 – Iran Business Relationship Affidavit  
00309 – Bid Division Descriptions  
00310 – Clarification Request Form  
00410 – Bid Security  
00500 – Notice to Proceed/Commencement of Work  
00510 – Sample Owner/Contractor Agreement  
00600 – Bonds  
00650 – Certificates of Insurance/Sample Form  
00670 – Schedule of Values  
00680 – Subcontractor, Supplier, Material, Equipment  
00690 – Employee Listing  
00700 – General Conditions of the Contract for Construction – AIA A232  
00900 – Addenda  
00999 – Milestone Schedule

**Division 1 – General Requirements**

01010 – Summary of Work	01520 – Construction Aids
01030 – Project Work Hours	01530 – Safety
01040 – Project Administration	01540 – Security
01045 – Contractor Applications for Payment	01550 – Access and Deliveries
01050 – Sworn Statements/Waivers	01560 – Temporary Controls
01051 – Change Events	01570 – Traffic Regulation
01053 – Change Orders	01580 – Project Informational Signs
01055 – Field Engineering	01590 – Project Field Office
01060 – Prevailing Wage	01600 – Material and Equipment
01085 – Applicable Standards	01700 – Contract Closeout
01100 – Alternates	01710 – Cleaning
01200 – Project Meetings	01720 – Record Documents
01300 – Submittals	01730 – Operating and Maintenance Data
01350 – Schedules	01740 – Guaranties and Warranties
01400 – Quality Control	01800 – Hazardous Materials Affidavit of Non-Use
01410 – Testing Services	01805 – AHERA Notification
01510 – Temporary Utilities	01900 – Demolition and Removal

**END OF SECTION 00005**

**Bay City Public Schools** will receive sealed bid proposals for construction trade work from qualified contractors for the **Bay City Public Schools, 2024 Sinking Fund, Bid Pack 11 Eastern HS at Handy MS**. A pre-bid meeting and project walk-through will be conducted by the Construction Manager, Wolgast Corporation, and the Architect, **WTA Architects**, on **Wednesday, February 14, 2024**, at **3:00 pm** (local time) at **Blend Street Entrance**.

Proposals may be mailed or delivered in person to **Stephen Bigelow, Superintendent**, c/o **Bay City Public Schools 601 Blend Street, Bay City MI 48706**. Proposals must be received prior to **1:30 PM** (local time) on **Friday, February 23, 2024**, at the **Bay City Public Schools Administration Building**. Proposals will be publicly/Virtually opened and read aloud at **1:31 PM** in the **Administration Office**. **Electronic Sealed bids must be submitted using Building Connected see below link.** <https://app.buildingconnected.com/login?retUrl=%2F> All bids will be evaluated after the bid opening. All bids received after **1:30 PM** of the bid date will be returned to the Bidder unopened.

If you would like to listen in while the bids are being opened, please use this link <https://8x8.vc/wolgast/lisa.donahue>

The Project will utilize separate prime contractors. All contracts for construction will be direct contracts with the Owner. Overall administration of the Project will be the responsibility of the Construction Management Firm, Wolgast Corporation, 4835 Towne Centre, Suite 203, Saginaw, Michigan 48604, Phone: (989) 790-9120, Fax: (989) 790-9063. The Owner will award contracts on or about **March 11, 2024**, to separate prime contractors for separate bid divisions or combinations of bid divisions. A Bidder may submit a proposal on more than one Bid Division; however, a separate bid must be submitted for each Bid Division of a combined bid. All bids shall be submitted on the bid forms provided in the project specifications, completely filled in, and executed (copies of the bid forms are acceptable). Facsimile bids will not be accepted.

The Bidders shall read and review the Bidding Documents carefully and familiarize themselves thoroughly with all requirements.

Requests by Contractors for inclusion, as Bidders shall be addressed to Wolgast Corporation. One (1) set of Bidding Documents will be provided to each contractor through Wolgast Corporation. Plans may be obtained from Wolgast Corporation, attention **Lisa Donahue (lodonahue@wolgast.com)** All questions regarding the bidding procedures, design, and drawing/specification intent are to be directed to the Construction Manager on a Clarification Request Form (Section 00310), attention **Dale Schwerin (dschwerin@wolgast.com)**

A Bid Security by a qualified surety authorized to do business in the state where the Project is located in the amount of five percent (5%) of Base Bids shall accompany each proposal or proposal combination. The Bid Security may be in the form of a Bid Bond, Cashier's Check, or Money Order. Personal checks are NOT acceptable. Bids may not be withdrawn for a period of sixty (60) days after the bid date. Successful Bidders may be required to furnish Surety Bonds as stated in the Project Specifications (Section 00600).

The Owner reserves the right to reject any or all proposals, accept a bid other than the low bid, and to waive informalities, irregularities, and/or errors in the bid proposals, which they feel to be in their own best interest.

All bidders must provide familial disclosure in compliance with MCL 380.1267 and attach this information to the bid. The bid shall be accompanied by a sworn and notarized statement disclosing any familial relationship that exists between the Owner or the employee of the bidder and any member of the board, intermediate school board, or board of directors or the superintendent of the school district, intermediate superintendent of the intermediate school district, or chief executive officer of the public-school academy. The district shall not accept a bid that does not include this sworn and notarized disclosure statement.

**END OF SECTION 00010**

**PART 1 – GENERAL**

**1.01 DEFINITIONS**

- A. The Owner is: **Bay City Public Schools.**
- B. The Architect is: **WTA Architects.**
- C. The Construction Manager is: **Wolgast Corporation.**
- D. The Project Team consists of the Construction Manager, the Architect, and other design professionals providing services in connection with the project.
- E. The Project is: **Bay City Public Schools, 2024 Sinking Fund, Bid Pack 11 Eastern HS at Handy MS**
- F. Work is any portion of the Project.
- G. The Bidding Documents include (as applicable to the Project):
1. The Notice to Bidders.
  2. The Instructions to Bidders.
  3. Bid Division Descriptions.
  4. Proposal Forms.
  5. Sample Contract Forms.
  6. The Specifications for the Project.
  7. The Drawings for the Project.
  8. All Addenda issued for the Project.
  9. The Preliminary Milestone Schedule.
- H. Addenda are written and/or graphic instruments issued by the Architect, which add to, delete from, clarify, or correct the Bidding Documents.
- I. Bids are sums stipulated in Proposals for which Bidders propose to perform the Work of Bid Divisions.
- J. Base Bids are sums stipulated in Proposals for which Bidders offer to perform the Work of Bid Divisions, and which Alternate Bids may be added to or deleted from.
- K. Alternate Bids are sums that may be added to or deleted from Base Bids for the performance of Alternate Work, as delineated in the Bidding Documents.
- L. Unit Prices are sums included in the Proposals as Bids per unit measure of materials and/or services, as required by the Bidding Documents.
- M. Proposals are complete, properly executed forms including Base Bids, Alternate Bids, Unit Prices, and other information requested by the Owner.
- N. Bidders are pre-qualified contractors who submit proposals to the Owner for Work as Prime Contractors on the Project.
- O. Bid Divisions are the divisions of Work into which the Project is divided for bidding. Bid Divisions shall not be confused with Technical Specification Divisions.
- P. Bid Division Descriptions (Section 00309) are written descriptions of the Work included in the Bid Divisions.

**1.02 MULTIPLE PRIME CONTRACTS/BID DIVISIONS**

- A. This is an Owner Represented Project. There is no General Contractor. All contracts awarded on the Project shall be prime contracts. The Owner will award contracts for each Bid Division and/or for groups of Bid Divisions. The Construction Manager will administrate the Project.
- B. Although each Bid Division involves an obvious and recognizable segment of “conventional” trade contracting, multiple contract project delivery requires that adjustments be made to permit the completion of each Bid Division as a separate segment of construction. Each bidder shall carefully review the total scope of their responsibilities with respect to the Work of their Bid Division(s) and shall provide for the total scope in their Proposal.
- C. Bid Division Descriptions (Section 00309) have been written to clearly delineate each Bid Division. The Owner is not responsible for a Bidder’s interpretation of the Bid Division Descriptions. Bidders are encouraged to request information by calling or emailing the Project Manager:

**Dale Schwerin**, Project Manager, Wolgast Corporation, (989) 790-9120, extension **704** or  
[dschwerin@wolgast.com](mailto:dschwerin@wolgast.com)

- D. For the purpose of clarity, the scope of work for each Bid Division may be divided into four categories: “GENERAL INCLUSIONS,” “DIVISION INCLUSIONS,” “PROJECT INCLUSIONS,” AND “EXCLUDED.”
1. Information provided under the heading “GENERAL INCLUSIONS” is the obvious and/or “conventional” work scope of each Bid Division.
  2. Information provided under “DIVISION INCLUSIONS” or “PROJECT INCLUSIONS” points out items which may be considered less obvious or “unconventional,” but which are included in the work scope of a particular Bid Division. (Information under these headings is not always necessary to delineate a Bid Division.)
  3. Information provided under “EXCLUDED” is for the purpose of indicating beginning and termination points, and/or to provide an understanding of fringe involvement included in Bid Divisions. (Information under this heading is not always necessary to delineate a Bid Division.)
- E. **Bidders shall construe nothing contained in the Bidding Documents, including the Bid Division Descriptions, as an assignment of work to any construction industry trade. Each Bidder is responsible for their own work assignments when making their proposal.**

**1.03 INTERFACING BID DIVISIONS**

- A. Each Bidder shall familiarize themselves with the work scope of all Bid Divisions that interface with their own. Each Bidder shall consider that the work of their Bid Division(s) may follow the work of another Division or other Divisions, and that other Contractors may perform work after the work of their Bid Division(s), and that other Contractors may work simultaneously with the work of their own Bid Division(s). Each Bidder shall include provisions for such interfaces and for cooperation with interfacing Contractors in their Proposal.

**1.04 PRE-BID CONFERENCE**

- A. **Blend Street Entrance**  
**Wednesday, February 14, 2024 at 3pm**

**1.05 BIDDING DOCUMENTS**

- A. Qualified Bidders have received sets of Bidding Documents. Requests from Bidders for additional sets of Bidding Documents will be honored under the conditions set forth in the Notice to Bidders (Section 00010).
- B. Following the award of construction contracts for the Project, all sets of Bidding Documents, plans, and specifications, except sets in possession of Contractors who have been awarded contracts, shall be returned to the Project Team.
- C. Bidders who return sets of Bidding Documents, plans, and specifications, in reasonably good condition shall have their plan deposit returned within ten (10) days of the Project Team's receipt of the documents.
- D. Bidders shall use complete sets of Bidding Documents in preparing Proposals. Bidders are responsible for ascertaining that the Bidding Documents upon which their Proposals are based are complete.
- E. Bidding Documents are provided to Bidders for uses pertaining to bidding only. No other use is permitted.
- F. Bidders shall promptly notify the Project Team of any ambiguities, inconsistencies, errors, and/or omissions they may discover in the Bidding Documents.
- G. Requests from Bidders for clarification or interpretation of the Bidding Documents must reach the Project Team five days before the bid date or by the date addressed in the pre-bid agenda. Any bidder clarifications which reach the Project Team after such dates have passed will not be considered.
- H. Changes and corrections to the Bidding Documents will be made by Addendum and distributed to Bidders.
- I. Each Bidder shall ascertain prior to submitting their Proposal that they have considered every Addendum issued prior to the Bid Date and shall acknowledge receipt of each Addendum in writing in their Proposal.

**1.06 PRELIMINARY MILESTONE SCHEDULE**

- A. The Preliminary Milestone Schedule is Section 00999 of this Project Manual.
- B. A Preliminary Milestone Schedule has been developed by the Construction Manager and supplied to the Bidders. Each Bidder is required to review the dates indicated in that Schedule, and either endorse or amend them within the context of the Bid Division(s) they are bidding. Space is provided on the Proposal Form for endorsement or amendment. The Milestone Schedule and the information it provides are not part of the Contract Documents.
- C. The milestone dates as endorsed and/or amended by successful bidders and accepted by the Owner will be used in the development of a Master Schedule to be used as a guide during the construction of the Project.
- D. Each Bidder is obligated to comment, in writing, on the Milestone Schedule if, in their opinion, the dates do not depict realistic time interval(s) for performance of the Work of their Bid Division(s)
- E. The effect of endorsements of and amendments to the Milestone Schedule will be considered when selecting Bidders for contract awards.

**1.07 BID SECURITY**

- A. Bid Security is required for this Project in the amount of five percent (5%). A surety company licensed, as such, to do business in the State of Michigan must issue a Bid Bond, and all other Bonds. For additional information and instructions regarding Bid Security, refer to Section 00410.

**1.07.1 AFFIDAVITS ACCOMPANYING BID PROPOSALS**

- A. All Bid Proposals shall include the Familial Affidavit form (see Section 00306 – Familial Affidavit) to be included as part of the Bid Proposal.
- B. All Bid Proposals shall include the State of Michigan required Iran Economic Sanctions Affidavit form (see Section – 00307 – Iran Economic Sanctions) to be included as part of the Bid Proposal.

**1.08 SUBSTITUTIONS**

- A. The materials, products, and equipment described in the Bidding Documents establish the quality standard, required function, dimensions, and appearance, which shall be met by all substitutions.
- B. Contractors may request items not included in the construction bid documents be considered for inclusion as acceptably specified items by submitting a written request to the Project Team addressed to the Construction Manager not later than ten (10) days prior to the bid date. The Construction Manager will forward these written requests to the Architect who will make the determination whether the requested item is an acceptable “equal”. These acceptable “equal” items will be identified as acceptable by their inclusion in a written Addendum.
- C. Each substitution request will include a complete description of the proposed substitute, drawings, cuts, performance and test data, the name of the material or equipment for which it is to be substituted, and any other information necessary for evaluation. A statement setting forth any changes in other materials, equipment, or work that incorporation of the substitute would require should also be included. The burden of proof of the merit of the proposed substitute is upon the Bidder. The Architect’s approval or disapproval of a proposed substitution shall be final.
- D. The bidder’s Base Bid contained in the Bid Proposal Form shall be the exact items contained in the construction bid documents (plans, specifications, or addenda). The Base Bid contained in the Bid Proposal Form shall not include any substitute items not allowed in the construction bid documents.
- E. Bidders that have other substitutions to be considered for inclusion in the Project must identify them as Voluntary Alternates in the portion of the Bid Proposal Form so designated. The identity of these items must include the all-product information and the dollar amount of increase or decrease associated with each individual substitute item.
- F. By making requests for any substitution, the Contractor represents:
  - 1. The Contractor has personally investigated the proposed substitution product and determined that it is equal to or superior to the product specified.
  - 2. The Contractor will provide the warranty for the substitution as the product specified.
  - 3. The cost data presented is complete and includes all related costs required for it to be incorporated into the Project including costs for additional Architectural and/or Construction Management services.
- G. The Architect will reply in writing to the Contractor, through the Construction Manager, stating whether the Owner or Architect, after due investigation, has reasonable objection to any substitution request. The decision of the Architect shall be final.

**1.09 VOLUNTARY ALTERNATES/VALUE ENGINEERING SUGGESTIONS**

- A. Base Bids and Alternate Bids shall be based upon the Bidding Documents, including approved substitutions, and on the Bidders’ evaluation of the Project Site. However, the Owner invites Voluntary Alternates or Value Engineering suggestions consistent with the intent of the Bidding Documents. Such Alternates and suggestions, if submitted, shall be incorporated into Proposals by describing Voluntary Alternate(s) on company letterhead and attached to the Bid Proposal Form.

**1.10 BID OPENING AND CONTRACT AWARDS**

- A. Bids will be opened publicly after the time and date established for receipt of Proposals. Bid Summaries will be made available to Bidders by request after the Bid Date, but not before Post Bid Interviews have been conducted.
- B. Contract awards will be based on Bidders' Proposals and ability to perform. The Owner intends to award contracts to Bidders who submit proper Proposals in accordance with the requirements of the Bidding Documents.
- C. Decisions regarding Bidders abilities affecting contract awards will be made by the Owner.
- D. The Owner reserves the right to waive any informality or irregularity in any Proposal.
- E. The Owner reserves the right to reject any Proposal.
- F. All awards will be made in the Owner's best interest.

**1.11 POST-BID INTERVIEWS**

- A. Bidders in contention for contract awards will be required to attend Post-Bid Interviews and submit post-bid submittals in rough draft for review.

**1.12 POST-BID SUBMITTALS**

- A. Bidders who have been notified of the Owner's intent to award a contract shall submit the following items to the Construction Manager:
  - 1. A Schedule of Values utilizing the level of detail requested by the Owner (reference Section 00670).
  - 2. A list of all subcontractors and suppliers to be used, and all items of material and equipment to be incorporated into the Project (reference Section 00680).
  - 3. The name(s) of the on-site supervisor(s) whom the Bidder proposes to employ to accomplish the Work (reference Section 00690).
  - 4. Sample copies of the construction contracts are included in Sections 00510.

**1.13 OWNER'S RIGHT TO APPROVE SUPPLIERS, SUBCONTRACTORS, MATERIALS, EQUIPMENT, AND EMPLOYEES**

- A. Bidders will be required to establish, to the satisfaction of the Owner, the reliability and responsibility of proposed employees, suppliers and subcontractors, and the suitability of proposed materials and equipment.
- B. Prior to the award of a contract, the Construction Manager will notify the Bidder if the Owner has reasonable and substantial objection to any person, organization, material, or equipment listed by the Bidder. If the Owner has a reasonable and substantial objection, the Bidder shall amend their Proposal by providing an acceptable substitute. The Owner may, at their discretion, accept such a substitute, or they may disqualify the Proposal.
- C. Suppliers, subcontractors, employees, materials, and equipment proposed by the Bidder and accepted by the Owner shall be used on the Work for which they are proposed and accepted and shall not be changed except with the written approval of the Owner.

**1.14 BONDS**

- A. Refer to Section 00600 for information and instructions regarding the bond requirements of this Project.



**1.15 INSURANCE**

**1.16**

- A. Refer to Sections 00650, and 00700 for information and instructions regarding insurance requirements for this Project.

**PART 2 – FORMS FOR BIDDING**

**2.0 PROPOSAL FORMS**

- A. Bidders are required to use the forms provided by the Owner for bidding purposes.
- B. Sample form(s) and instructions are in Section 00305 of this project manual.

**PART 3 – PROCEDURES AND CONDITIONS FOR BIDDING**

**3.01 COMPLETION OF PROPOSAL FORMS**

- A. Refer to Section 00300 for detailed information and instructions regarding completion of Proposal Forms.

**3.02 SUBMISSION OF PROPOSALS**

- A. Proposals shall be submitted to:

Bay City Public Schools  
Stephen Bigelow, Superintendent  
601 Blend Street  
Bay City MI 48706

**Electronic Sealed bids must be submitted using Building Connected see below link.**

<https://app.buildingconnected.com/login?retUrl=%2F>

(Refer to Section 00010 – Notice to Bidders for additional information and instructions regarding the location for submittal of Proposals.)

If you want to listen in while the bids are being opened, please use this link <https://8x8.vc/wolgast/lisa.donahue>

- B. Proposals shall be submitted by **1:30 PM on Friday, February 23, 2024.**  
(Refer to Section 00010 – Notice to Bidders for additional information and instructions regarding the date and time of submittal of Proposals.)
- C. **Bidders shall bear full responsibility for delivering Proposals to the required location by the time and date established.**

**3.03 MODIFICATION OR WITHDRAWAL OF PROPOSALS**

- A. A Proposal may not be modified, withdrawn, or cancelled by the Bidder within sixty (60) days following the time and date designated for the receipt of Proposals and the Bidder so agrees in submitting their Proposals.
- B. Prior to the time and date designated for receipt of Proposals, Proposals may be modified or withdrawn. Modifications and withdrawals shall be in writing or by telegram. If by telegram, written confirmation shall have been mailed and postmarked before the date and time set for receipt of Proposals. Telegraphic communications shall be worded so that the amounts of the original Proposals are not revealed.
- C. Withdrawn Proposals may be resubmitted up to the time and date designated for receipt of Proposals.

**3.04 BIDDERS' REPRESENTATION AND ACKNOWLEDGEMENTS**

A. In submitting their Proposal, each Bidder represents that:

1. They have read and understand the Bidding Documents.
2. Their Proposal is made in accordance with the Bidding Documents.
3. They have visited the Project Site and have familiarized themselves with the local conditions under which the Work they are bidding will be performed.
4. **They will accept the contract award, regardless of the identity of other Contractors on the Project.**
5. **During contract performance, they will not interrupt their Work nor impede the progress of other Contractors as a result of prejudice based on sex, race, color, creed, labor affiliation, or lack of labor affiliation of Contractors or employees of Contractors engaged on this Project.**

B. In submitting their Proposal each bidder acknowledges:

1. The right of the Owner to accept or reject any Proposal, to waive any informality or irregularity in any Proposal received, and to accept other than the low Bid.
2. The right of the Owner to accept any combination of Bid Divisions they desire.
3. The right of the Owner to award contracts in their own best interest.

**3.05 OTHER INFORMATION**

A. All Bidders shall comply with the requirements of the Bidding Documents, Addenda, and all applicable codes, laws, and regulations in preparing and submitting their Proposals.

B. Refer to Section 00300 – Instructions for Proposals and Bid Division Descriptions for additional information and instructions regarding Proposals.

**END OF SECTION 00100**

**PART 1 – GENERAL**

**1.01 PROPOSAL FORMS**

- A. A separate set of Proposal Forms, Bid Division Descriptions, Drawings, Contract Conditions, Specifications, and Preliminary Milestone Schedule(s).
- B. Bidders shall use the copies of Proposal Forms included in the separate sets of Bidding Documents. Copies of the Proposal Forms are acceptable.

**1.02 BID DIVISION DESCRIPTIONS**

- A. Section 00309 contains the Bid Division Descriptions. Each Bid Division Description represents a separate, self-contained Scope of Work. Bid Divisions are the basic divisions of Work into which the Project has been divided for bidding and construction.

**PART 2 – PROPOSAL FORMAT**

**2.01 BID PROPOSALS**

- A. Bidders are required to use the Proposal Forms provided by the Owner.
- B. A complete Proposal consists of:
  - 1. **Submit 2 complete copy of your proposal and bonds, on the Proposal Form – Section 00305.**
  - 2. Alternate Pricing forms (if applicable to this Project).
- C. Each Proposal shall have a Bid Security in the amount of five percent (5%) attached to the proposal.
- D. All spaces provided on the Proposal Form(s) shall be filled in. If any space provided is not utilized by the Bidder, that space shall be filled in with the notation “N/A” (Not Applicable).
- E. The Proposal Form(s) shall be filled in by typewriter or printed manually in ink.
- F. Where indicated, all sums shall be expressed in words and figures.  
**In case of discrepancy, the words shall govern.**
- G. **Bidders shall not make unsolicited notations or statements on the Proposal Form(s). Alteration of the Proposal Form(s) is not permitted.**
- H. All changes to and erasures of the Bidder’s entries shall be initialed by the signer of the Proposal.
- I. Each Proposal shall include the legal name of the Bidder and a statement regarding whether the Bidder is a sole proprietor, a partnership, a corporation, or other type of legal entity. Proposals submitted by corporations shall have the state of incorporation noted and shall have corporate seals affixed. Any Bid submitted by an agent shall have a current Power of Attorney attached, certifying the agent’s power to bind the Bidder.

**2.02 ALTERNATES**

- A. **All requested Alternates shall be bid with all lines completed or the Proposal will be considered incomplete.**

**PROPOSAL FOR MULTIPLE BID DIVISIONS**

- A. Each Bidder shall submit only one (1) Proposal for each Bid Division the Contractor is bidding. There is no limit to the number of Bid Divisions a Bidder may bid on.
- B. Each Bidder is required to include a separate Bid for each Bid Division in order to be considered for a contract award. Spaces are provided in the Proposal Form(s) to reference multiple Proposals.
- C. Multiple Bid Proposals shall contain separate Proposal Forms for each Bid Division being bid.
  - 1. Each Proposal Form shall be fully completed.
  - 2. The Bid for each Bid Division shall be independent of Bids for other Bid Divisions.
  - 3. Bidders shall use the "Combined Bid Deduct" section of the Proposal Form (Section 00305) to finalize multiple Bid Proposals.

**PART 3 – COMPLETION OF PROPOSAL FORMS AND SEALED BID ENVELOPE**

**3.01 PROPOSAL FOR (SECTION 00305)**

- A. Each Bid Division shall be submitted in a separate envelope, with a separate Bid Bond.
- B. Fill in the legal name of the Bidder, the address, the telephone number, fax number, contact name and contact email.
- C. Fill in the name and number of the Bid Division covered by the Proposal.
- D. Fill in the numbers and dates of all Addenda issued, received, and considered a part of the Proposal. Proposals must include acknowledgement of all Addenda issued up to the Bid Date.
- E. On the Proposal Form(s), fill in the Lump Sum Base Bid for the Bid Division. Fill in the amount in both words and figures. DO NOT include costs for Performance Bonds or Labor/Materials Payment Bond in the Base Bid amount.
- F. Fill in the cost(s) for Performance Bond(s) and Labor and Material Payment Bond(s) in the amount(s) requested (reference Section 00600), in the space(s) provided. Fill in the amount(s) in both words and figures.
- G. In the "Combined Bid Deduct" portion of the Proposal Form(s), state the amount(s) to be deducted from the total of your Base Bid should you be awarded contracts for multiple Bid Divisions. State the numbers of the Bid Divisions included in each combination, and the amount to be deducted from the total of all Base Bids in each combination.
- H. If Alternate Bid(s) have been requested, fill in the Lump Sum Bid for each Alternate Bid in the space provided. DO NOT include costs for Performance Bonds or Labor and Material Payment Bonds.
- I. Fill in the anticipated date(s) of indicated Shop Drawings and/or Sample Submittal(s) in the space(s) provided.
- J. Fill in the anticipated number of weeks needed for fabrication of indicated items, beginning on the Bid Date.
- K. Fill in the anticipated number of on-site staff.
- L. Fill in the anticipated number of days to complete the Work.
- M. Fill in the anticipated number of weeks needed for delivery of indicated items, beginning on the Bid Date.
- N. Fill in the names of the manufacturers, suppliers, and/or subcontractors of indicated items.

- O. If you choose to submit Voluntary Alternates or Value Engineering Suggestions, please summarize your suggestions and state the amount to be deducted from the Base Bid.
- P. Review the “Bid Division Responsibilities” portion of the Proposal Form.
- Q. Review the “Schedule” portion of the Proposal Form.
- R. If the Proposal includes exceptions or substitutions to any part of the Bidding Documents or the Contract Documents, state the exceptions or substitutions in writing on the Proposal Form.
- S. Fill in the Bidder’s legal name.
- T. Indicate the Bidder’s status as a sole proprietor, partnership, corporation, or other type of entity.
- U. Sign the Proposal Form in the space provided.
- V. Type or print the signer’s name and title in the spaces provided below the signature line.
- W. Date the Proposal Form in the space provided.
- X. Provide a phone number, fax number and email address on the space provided.

**3.02 SEALED BID ENVELOPE**

- A. Bids submitted must be sealed, preferably in a 9” x 12” manila envelope.
- B. Each Bid Division is to be submitted in a separate envelope.
- C. **Label the sealed bid as follows:**

<b>TO:</b>	<b>Bay City Public Schools</b> <b>Attn: Stephen Bigelow</b> <b>601 Blend Street</b> <b>Bay City MI 48706</b>
	<b><u>SEALED BID FOR:</u></b>
	<b>Bay City Public Schools</b> <b>2024 Sinking Fund Bid Pack 11 Eastern HS at Handy MS</b>
	<b>Bid Division No:</b> _____

**END OF SECTION 00300**

**Project:** Bay City Public Schools  
2024 Sinking Fund Bid Pack 11 Eastern HS at Handy MS

Submitted By: \_\_\_\_\_  
(Bidder's Company Name)

Address: \_\_\_\_\_

City / State / Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

Contact Name: \_\_\_\_\_

Email: \_\_\_\_\_

**Bid Proposal Deadline: Prior to Friday, February 23, 2024 at 1:30 PM (local time) to:**

Bay City Public Schools  
Stephen Bigelow, Superintendent,  
601 Blend Street  
Bay City MI 48706.

Electronic Sealed bids must be submitted using Building Connected see below link.  
<https://app.buildingconnected.com/login?retUrl=%2F>

**Bid Division Name:** \_\_\_\_\_

**Bid Division Number:** \_\_\_\_\_

**ADDENDA**

We (the Bidder) acknowledge receipt of the following Addenda:

- Addendum #\_\_ Dated \_\_\_\_\_
- Addendum #\_\_ Dated \_\_\_\_\_
- Addendum #\_\_ Dated \_\_\_\_\_

**BID BOND ATTACHED?**

- Yes, 5% Bid Bond is Attached**
- Certified Check/Money Order for 5% of Base Bid is Attached**

**BASE BID for Bay City Public Schools – BP 11 Eastern HS at Handy MS (not including Labor Bond, Material Bond, and/or Performance Bond Costs):**

\_\_\_\_\_ Dollars and 00/100ths

\$ \_\_\_\_\_

**BOND COST for Bay City Public Schools – BP 11 Eastern HS at Handy MS (Cost to provide Labor Bond, Material Bond, and/or Performance Bonds on Base Bid):**

\_\_\_\_\_ Dollars and 00/100ths

\$ \_\_\_\_\_

**COMBINED BID DEDUCT**

If awarded a contract for the Work, combining the following Bid Division(s), the corresponding amount(s) may be deducted from the Base Bid(s) of each of the involved Bid Divisions.

Bid Divisions Combined

Deduct from each Bid Division:

---

---

---

---

---

---

---

---

**ALTERNATES**

**Alternate 1** – Existing Red Lockers to be prepped and painted.

**Alt 1 ADD/DEDUCT** \_\_\_\_\_

**Alt 1 BOND** \_\_\_\_\_

**Alternate 2** – Existing Red lockers to be removed and replaced with new metal lockers.

**Alt 2 ADD/DEDUCT** \_\_\_\_\_

**Alt 2 BOND** \_\_\_\_\_

**Alternate 3** – Existing Men’s and Women’s toilet rooms to be remodeled as shown on Drawings. For walls – SGFT walls to be patched with similar SGFT (color not matching) at plumbing locations, prepped and epoxy painted.

**Alt 3 ADD/DEDUCT** \_\_\_\_\_

**Alt 3 BOND** \_\_\_\_\_

**Alternate 4** – Existing Men’s and Women’s toilet rooms to be remodeled as shown on Drawings. For walls – Grind off terrazzo cove and provide new ceramic wall tile on ½” tile backer board mechanically fastened to wall. At Urinal wall, include metal furring.

**Alt 4 ADD/DEDUCT** \_\_\_\_\_

**Alt 4 BOND** \_\_\_\_\_

**SUBMITTALS**

Anticipated Date of Shop Drawing Submittal at Post Bid Interview: \_\_\_\_\_

Anticipated Number of Days to Begin: \_\_\_\_\_

Anticipated Number of On-site Staff: \_\_\_\_\_

Anticipated Number of Days to Complete: \_\_\_\_\_

Anticipated Number of Days for Delivery of Needed Items: \_\_\_\_\_

Proposed Manufacturers, Suppliers, and/or Subcontractors:

<u>Item(s)</u>	<u>Manufacturer/Subcontractor/Supplier</u>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

**VOLUNTARY ALTERNATES / VALUE ENGINEERING SUGGESTIONS**

We suggest the following alternate procedure(s) and/or material(s):

<u>Summary of Suggestions</u>	<u>Deduct from Base Bid</u>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

**BID DIVISION RESPONSIBILITY**

We recognize that the Scope of Work within a Bid Division represents a construction segment that is not necessarily restricted to a single construction trade, and our Proposal includes work of all trades required to fully and successfully complete all of the Work required in the Bid Division(s) we have submitted Proposals for:

**SCHEDULE**

We have reviewed the Preliminary Milestone Schedule and hereby endorse it with regard to the Work of Bid Division(s) we have bid. ALL WORK MUST BE COMPLETED BY **Refer to Milestone Schedule.**



**EXCEPTIONS AND/OR SUBSTITUTIONS**

We have submitted our Proposal, as specified, complete and in accordance with the Bidding Documents, including Addenda and the Contract Documents, without exceptions or substitutions, unless otherwise noted in the "Voluntary Alternate / Value Engineering Suggestions" portion of this Proposal Form.

**EXECUTION**

Name of Bidder: \_\_\_\_\_

Bidder's Status:  
\_\_ Corporation; \_\_ Partnership; \_\_ Sole Proprietor; \_\_ Other: (Please Specify: \_\_\_\_\_)

By/Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Email: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

END OF SECTION 00305

**Familial Relationship Sworn Statement**

\_\_\_\_\_ does hereby disclose that per MCL 380.1267:  
Company Name

**YES**, there exists a familial relationship between the Owner of the project or any member of their Board, or Board of Directors, or the Superintendent of the School district, intermediate superintendent of the intermediate school district, or chief executive officer of the public-school academy and the Owner or an employee(s) of \_\_\_\_\_.  
Company Name

Disclosure Between:

Name \_\_\_\_\_ AND Name \_\_\_\_\_

Title: \_\_\_\_\_ Title: \_\_\_\_\_

Relationship: \_\_\_\_\_ Relationship: \_\_\_\_\_

**NO**, there does not exist a familial relationship between the Owner of the project or any member of their Board, or Board of Directors, or the Superintendent of the School district, intermediate superintendent of the intermediate school district, or chief executive officer of the public school academy and the Owner or an employee(s) of \_\_\_\_\_.  
Company Name

Name (printed): \_\_\_\_\_

Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Notary Public(printed): \_\_\_\_\_

Signature: \_\_\_\_\_

County: \_\_\_\_\_

Date: \_\_\_\_\_ My Commission Expires: \_\_\_\_\_

Affix Notary Seal Here:



**END OF SECTION 00306**

## Iran Business Relationship Affidavit

Effective April 1, 2013, all bids, proposals, and/or qualification statements received in the State of Michigan must comply with the "Iran Economic Sanctions Act". The following certification is to be signed and included at time of submittal.

### CERTIFICATION

Pursuant to the Michigan Iran Economic Sanctions Act, 2012 P.A. 517, by submitting a bid, proposal or response, Respondent certifies, under civil penalty for false certification, that it is fully eligible to do so under law and that it is not an "Iran linked business," as that term is defined in the Act.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company

\_\_\_\_\_  
Date

**END OF SECTION 00307**

**IRAN ECONOMIC SANCTIONS ACT**  
**Act 517 of 2012**

AN ACT to prohibit persons who have certain economic relationships with Iran from submitting bids on requests for proposals with this state, political subdivisions of this state, and other public entities; to require bidders for certain public contracts to submit certification of eligibility with the bid; to require reports; and to provide for sanctions for false certification.

*History:* 2012, Act 517, Eff. Apr. 1, 2013.

*The People of the State of Michigan enact:*

**129.311 Short title.**

Sec. 1. This act shall be known and may be cited as the "Iran economic sanctions act".

*History:* 2012, Act 517, Eff. Apr. 1, 2013.

**129.312 Definitions.**

Sec. 2. As used in this act:

(a) "Energy sector of Iran" means activities to develop petroleum or natural gas resources or nuclear power in Iran.

(b) "Investment" means 1 or more of the following:

(i) A commitment or contribution of funds or property.

(ii) A loan or other extension of credit.

(iii) The entry into or renewal of a contract for goods or services.

(c) "Investment activity" means 1 or more of the following:

(i) A person who has an investment of \$20,000,000.00 or more in the energy sector of Iran.

(ii) A financial institution that extends \$20,000,000.00 or more in credit to another person, for 45 days or more, if that person will use the credit for investment in the energy sector of Iran.

(d) "Iran" means any agency or instrumentality of Iran.

(e) "Iran linked business" means either of the following:

(i) A person engaging in investment activities in the energy sector of Iran, including a person that provides oil or liquefied natural gas tankers or products used to construct or maintain pipelines used to transport oil or liquefied natural gas for the energy sector of Iran.

(ii) A financial institution that extends credit to another person, if that person will use the credit to engage in investment activities in the energy sector of Iran.

(f) "Person" means any of the following:

(i) An individual, corporation, company, limited liability company, business association, partnership, society, trust, or any other nongovernmental entity, organization, or group.

(ii) Any governmental entity or instrumentality of a government, including a multilateral development institution, as defined in section 1701(c)(3) of the international financial institutional act, 22 USC 262r(c)(3).

(iii) Any successor, subunit, parent company, or subsidiary of, or company under common ownership or control with, any entity described in subparagraph (i) or (ii).

(g) "Public entity" means this state or an agency or authority of this state, school district, community college district, intermediate school district, city, village, township, county, public authority, or public airport authority.

*History:* 2012, Act 517, Eff. Apr. 1, 2013.

**129.313 Ineligibility of Iran linked business to submit request for proposal bid; certification.**

Sec. 3. (1) Beginning April 1, 2013, an Iran linked business is not eligible to submit a bid on a request for proposal with a public entity.

(2) Beginning April 1, 2013, a public entity shall require a person that submits a bid on a request for proposal with the public entity to certify that it is not an Iran linked business.

*History:* 2012, Act 517, Eff. Apr. 1, 2013.

**129.314 Effect of false certification.**

Sec. 4. If a public entity determines, using credible information available to the public, that a person has submitted a false certification under section 3(2), the public entity shall provide the person with written notice of its determination and of the intent not to enter into or renew a contract with the person. The notice shall include information on how to contest the determination and specify that the person may become eligible for a

future contract with the public entity if the person ceases the activities that cause it to be an Iran linked business. The person shall have 90 days following receipt of the notice to respond in writing and to demonstrate that the determination of false certification was made in error. If a person does not make that demonstration within 90 days after receipt of the notice, the public entity may terminate any existing contract and shall report the name of the person to the attorney general together with information supporting the determination.

**History:** 2012, Act 517, Eff. Apr. 1, 2013.

**129.315 Civil action; penalty.**

Sec. 5. The attorney general may bring a civil action against any person reported under section 4. If a civil action results in a finding that the person submitted a false certification, the person is responsible for a civil penalty of not more than \$250,000.00 or 2 times the amount of the contract or proposed contract for which the false certification was made, whichever is greater, the cost of the public entity's investigation, and reasonable attorney fees, in addition to the fine. A person who submitted a false certification shall be ineligible to bid on a request for proposal for 3 years from the date the public entity determines that the person has submitted the false certification.

**History:** 2012, Act 517, Eff. Apr. 1, 2013.

**129.316 Conditional effect.**

Sec. 6. The provisions of this act are effective only if Iran is a state sponsor of terror as defined under section 2 of the divestment from terror act, 2008 PA 234, MCL 129.292.

**History:** 2012, Act 517, Eff. Apr. 1, 2013.

**END OF SECTION 00307**

**Bid Division: 060000 – General Trades**

**Bid to Include:**

**Total Responsibility for Specification Sections:**

Section 024119 – Selective Demolition  
Section 033000 – Cast in Place Concrete  
Section 042000 – Unit Masonry  
Section 054000 – Cold Formed Metal Framing  
Section 055000 – Metal Fabrications  
Section 061053 – Miscellaneous Rough Carpentry  
Section 062023 – Interior Finish Carpentry  
Section 064116 – Plastic Laminate Clad Architectural Cabinets  
Section 081113 – Hollow Metal Doors and Frames  
Section 081416 – Flush Wood Doors  
Section 087100 – Door Hardware  
Section 088000 – Glazing  
Section 092216 – Non-Structural Metal Faming  
Section 092900 – Gypsum Board  
Section 095113 – Acoustical Panel Ceilings  
Section 102113.19 – Solid Polymer Toilet Compartments  
Section 102800 – Toilet Room Accessories  
Section 105113 – Metal Lockers  
Section 107313 - Awnings

**Limited Responsibility for Specification Sections (as it relates to work in this Bid Division):**

Section 079200 – Joint Sealants (As it relates to work in this Bid Division)

**Provide all labor, materials, tools, and equipment necessary to perform the work of the specified bid sections. The contractor must also furnish, deliver, unload, store, protect, erect and install all items required for the completion of the work of this bid division in compliance with all drawings and specifications for a complete operational system including but not limited to:**

**General Inclusions:**

1. There is no general contractor associated with this project; any and all reference to a “general contractor” related to the work of this bid division shall be understood to mean the contractor of this bid division.
2. The contractor for this bid division work is required to include but is not limited to all items, services, tasks, materials, personnel, equipment, etc. identified in this bid division description regardless of the presence of language in other bid division descriptions that is the same or is similar to that found in this contractor’s bid division description.
3. Coordination of the work of this bid division with any and all work of other bid division contractors for the scheduling and integration of the work of this contractor.
4. All contractors are responsible for the entire set of plans and specifications; including tables, schedules, and notes.
5. Provide continuous housekeeping and clean-up, and proper legal off-site disposal of any debris generated by this Bid Division’s work.
6. Contractor is responsible for own dumpster(s) and all removal and disposal charges thereof. (Use of the Owner’s dumpsters is strictly prohibited.)
7. All Contractors are required to inspect the existing project components and are to include all work necessary to complete the work to deliver a fully operational system in compliance with all governing codes.

**Bid Division: 060000 – General Trades**

8. This Contractor shall be responsible for performing all work in full compliance with all health and safety standards including Asbestos Awareness and Notification, Lead Paint Abatement, and all MIOSHA Standards. This Contractor shall also be responsible for satisfying all safety violations and/or fines resulting from the actions or lack of action by this Contractor at the sole expense of this Contractor.
9. Any contractor who compounds a mistake by installing their product on another Contractor's obvious faulty work will assume responsibility for repair of said work.
10. This contractor shall repair and restore any damaged area to an original or better condition with no detectable evidence that the area has been repaired. Repairs must be done by personnel qualified in the execution of the work skilled and licensed in that trade. Whenever possible, repairs to work shall be done by the original installer of the work.
11. Submittal of all insurance, unit pricing, schedule of values, required product data and shop drawings within (2) two weeks of Owner's Notice to commence work.
12. Must provide all submittals within 20 working days of contract award or sooner, unless specifically clarified with the construction manager prior to contract award.
13. Provide all layout and measurements required to perform the work of this Bid Division.
14. The Owner reserves the right to salvage any materials removed from the site during the duration of the project.
15. Coordinate delivery of materials with Construction Manager (48 hours) in advance of the delivery, and provide proper personnel and equipment to perform the unloading.
16. Contractor shall submit to the field construction manager a complete written daily field report stating the work being done on site and the number of employees performing the work for each day the Contractor has representatives on site.
17. Contractor shall have a supervisor on site at all times when a crew is present on the job.
18. On Friday, or last workday of each week, the Contractor must update the Master Copy of As-Built, as it applies to the work of their Bid Division.
19. **Wolgast uses Procore for their CM Software. Please note: We will upload all drawings, and drawing revisions as they are approved, to the Drawings tool. However, it is each contractor's responsibility to verify that they are working from the most up-to-date, approved, drawings.**

**Division Inclusions:**

1. Unloading, protection and record of all hollow metal doors and frames.
2. All wood nailers for roof blocking, fascia, masonry, etc.
3. Wood blocking around windows and doors.
4. All temporary shoring as required for work in this Bid Division.
5. Provide, receive, store, protect, inventory, and install all described bid items.
6. Provide for proper legal off-site disposal off all construction debris generated by the described work.
7. Provide wood base for lockers, if required.
8. Remove items indicated: clean, service and otherwise prepare them for reuse; store and protect against damage. Reinstall items in the same locations or in locations indicated.
9. Remove and legally dispose of items not indicated to be reinstalled, salvaged or to remain the Owner's property.
10. Install all doorframes, and coordinate with mason contractor.
11. Cover all countertops with double layered corrugated cardboard.
12. Clean and dust all casework upon completion.
13. Clean, prep and adjust all equipment immediately prior to Owner occupancy.
14. Patch all demolished areas and items affected by demolition to a condition ready to receive finishes and finish materials.
15. Furnish and install all joint sealants and fire stopping as indicated in specifications and drawings including but not limited to perimeter joints of doors and louvers at interior and exterior, perimeter joints between interior wall surfaces and frames of interior doors and all other joints indicated.
16. Provide all temporary enclosures as required, review demo drawings throughout the duration of construction.
17. Contractor shall furnish and install temporary insulated weather-tight closures of openings created as a result of the work in this scope in exterior surfaces to provide acceptable working conditions and protection for materials, to allow for temporary heating, and for building security. Provide doors with self-closing hardware and locks.

**Bid Division: 060000 – General Trades**

18. Provide all wood framing, plywood and nailers as shown and specified.
19. Provide all wood blocking in metal stud walls for all materials that will require it, including but not limited to, casework, fixtures, toilet accessories, coat racks, signage, curtains, marker & tack boards, etc.

**Project Inclusions:**

1. Price all alternates
2. Include the grinding off the terrazzo cove in the toilet rooms for alternate 4.
3. Include all removals called out on the drawings.
4. Include flooring removal for existing classrooms G101 and G102. These are currently not shown on the demo drawing to be removed.
5. Salvage all items noted on the drawings and turn them over to the owner.
6. Provide and install noted Restroom accessories.
7. Install Owner provided accessories.
8. Include all patching and repairing of wall surface at all removal areas.
9. Include all concrete slab patches as required.
10. Include framing and finishing of mechanical chase.
11. Include tree trimming for awning installation.
12. Include removal and reinstallation of metal panel, soffit, and fascia, at new awning location to verify framing.
13. Provide and install awning with signage.
14. Provide and install all doors, door frames, glass, and hardware.
15. Provide and install new toilet compartments.
16. Provide and install Reception Desk. Include all stud wall framing and support brackets.
17. Install salvaged cabinets per drawings.
18. Provide and install new ceiling grid and tile.
19. Remove and reinstall ceiling grid and tile as note for above ceiling work.
20. Provide and install all wall framing, insulation, and drywall. Include all soffits and headers.
21. Note that any drywall for this project is impact resistant board.
22. Include all masonry wall infills. Include all material for a complete installation.
23. Wall types are noted on drawing A0.01.
24. Include all wood blocking to complete your installation.
25. Provide all above wall support framing, lintels, knee bracing, and steel framing a RTU opening.

**Excludes:**

1. All demolition of conduits, ducts, pipes, fixtures, etc. (demolition required for all mechanical, plumbing, and electrical work) is to be performed by the specific mechanical, plumbing and electrical contractors.
2. Roofing and flashing of new curbs by Mechanical Contractor.
3. Tile backer board for alternate 4.
4. Cutting in roof deck openings.

**Consideration for award:**

The ability to begin as soon as areas of work become available. To have proper equipment and responsible personnel to complete the above list of work. To repair any adjacent materials damaged in the execution of the above listed work. Close cooperation with the Construction Manager and other bid divisions to provide input to develop a working schedule. An approved schedule of values will be required before approval is granted for the first payment request. Expediting communication and follow-up as required.

**END OF BID DIVISION 060000**

**Wolgast Corporation – Construction Management**





**Submittal Packages**

Spec Section	#	Rev.	Title	Type	Status	Responsible Contractor	Submit By	Received From	Received Date	Ball In Court	Approvers	Response	Sent Date	Returned Date	Final Due Date	Distributed Date
<b>#2 06 00 00 - General Trades - Start Up</b>																
	1	0	Post Bid Interview/Proposal Forms		Draft											
	2	0	Schedule of Values		Draft											
	3	0	Contracts Signed/Returned		Draft											
	4	0	Payment/Performance Bonds		Draft											
	5	0	Insurance/Letter of Compl		Draft											
	6	0	On Site Employee List		Draft											
	7	0	Safety Policy		Draft											
	8	0	Safety Data Sheets (SDS)		Draft											
	9	0	Sub/Supplier Form		Draft											
	10	0	Hazardous/AHERA Notifications		Draft											
<b>#3 06 00 00 - General Trades - Close Out</b>																
	11	0	Contractor (2) Yr Guarantee		Draft											
	12	0	Consent of Surety		Draft											
	13	0	Substantial Completion		Draft											
	14	0	Completed Punch List		Draft											
	15	0	As Built Drawings		Draft											
	16	0	All CO Signed/Returned		Draft											
	17	0	Insurance Up-To-Date		Draft											
	18	0	Signed Hazardous Materials		Draft											
	19	0	Asbestos Materials Affidavits		Draft											
	20	0	Warranties for Equipment Installed		Draft											
	21	0	O&M Manuals		Draft											
079200 - JOINT SEALANTS	079200-3	0	Joint Sealant - Special 10yr warranty	Closeouts	Draft											
087100 - DOOR HARDWARE	087100-4	0	Door Hardware - warranties	Closeouts	Draft											
088000 - GLAZING	088000-4	0	Glazing Warranty 10yrs see spec	Closeouts	Draft											
095110 - Acoustical Panel Ceilings	095110-3	0	Acoustical Panel maintenance data	Closeouts	Draft											
102113 - Toilet Compartments	102113-4	0	Toilet Compartments maintenance data	Closeouts	Draft											
102113 - Toilet Compartments	102113-5	0	Toilet Compartments 15yr warranty	Closeouts	Draft											
102800 - TOILET ROOM ACCESSORIES	102800-2	0	Toilet Room Accessories Warranty	Closeouts	Draft											
102800 - TOILET ROOM ACCESSORIES	102800-3	0	Toilet Room Accessories maintenance data	Closeouts	Draft											
105113 - METAL LOCKERS	105113-4	0	Metal Lockers maintenance	Closeouts	Draft											
105113 - METAL LOCKERS	105113-5	0	Metal Lockers - warranty	Closeouts	Draft											
107313 - AWNINGS	107313-4	0	Awnings manuals see spec	Closeouts	Draft											
107313 - AWNINGS	107313-5	0	Awing Warranty	Closeouts	Draft											
<b>#1 06 00 00 - General Trades</b>																
033000 - CAST IN PLACE CONCRETE	033000-1	0	Cast in Place Concrete - product data	Product Information	Draft											
033000 - CAST IN PLACE CONCRETE	033000-2	0	Cast in Place Concrete - mix design	Other	Draft											
042000 - UNIT MASONRY	042000-1	0	Unit Masonry product data	Product Information	Draft											
042000 - UNIT MASONRY	042000-2	0	Unit Masonry shop drawings see spec	Shop Drawing	Draft											



Spec Section	#	Rev.	Title	Type	Status	Responsible Contractor	Submit By	Received From	Received Date	Ball In Court	Approvers	Response	Sent Date	Returned Date	Final Due Date	Distributed Date
042000 - UNIT MASONRY	042000-3	0	Unit Masonry samples see spec	Sample	Draft											
042000 - UNIT MASONRY	042000-4	0	Unit Masonry mortar mix design	Other	Draft											
054000 - COLD FORMED METAL FRAMING	054000-1	0	Cold Formed Metal Framing product data	Product Information	Draft											
054000 - COLD FORMED METAL FRAMING	054000-2	0	Cold Formed Metal Framing shop drawings see spec	Shop Drawing	Draft											
055000 - METAL FABRICATIONS	055000-1	0	Metal Fab shop drawings see spec	Shop Drawing	Draft											
061053 - MISCELLANEOUS ROUGH CARPENTRY	061053-1	0	Misc Rough Carpentry product data	Other	Draft											
062023 - INTERIOR FINISH CARPENTRY	062023-1	0	Interior Finish Carpentry product data	Product Information	Draft											
062023 - INTERIOR FINISH CARPENTRY	062023-2	0	Interior Finish carpentry shop drawings see spec	Shop Drawing	Draft											
062023 - INTERIOR FINISH CARPENTRY	062023-3	0	Interior finish Carpentry samples of laminate see spec	Sample	Draft											
064116 - PLASTIC-LAMINATE CLAD ARCHITECTURAL CABINETS	064116-1	0	Plastic Lam Cabinets product data	Product Information	Draft											
064116 - PLASTIC-LAMINATE CLAD ARCHITECTURAL CABINETS	064116-2	0	Plastic Lam Cabinets shop drawings see spec	Shop Drawing	Draft											
064116 - PLASTIC-LAMINATE CLAD ARCHITECTURAL CABINETS	064116-3	0	Plastic Lam Cabinets samples of colors	Sample	Draft											
079200 - JOINT SEALANTS	079200-1	0	Joint Sealant product data	Other	Draft											
079200 - JOINT SEALANTS	079200-2	0	Joint Sealant - sample of colors	Sample	Draft											
081113 - HOLLOW METAL DOORS AND FRAMES	081113-1	0	HM Doors and Frames product data	Product Information	Draft											
081113 - HOLLOW METAL DOORS AND FRAMES	081113-2	0	HM Doors and Frames shop drawings see spec	Shop Drawing	Draft											
081113 - HOLLOW METAL DOORS AND FRAMES	081113-3	0	HM Doors and Frames door schedule	Other	Draft											
081416 - FLUSH WOOD DOORS	081416-1	0	Flush Wood Doors product data	Other	Draft											
081416 - FLUSH WOOD DOORS	081416-2	0	Flush Wood Doors shop drawings see spec	Shop Drawing	Draft											
081416 - FLUSH WOOD DOORS	081416-3	0	Flush Wood Doors samples of finishes see spec	Sample	Draft											
087100 - DOOR HARDWARE	087100-1	0	Door Hardware schedule	Other	Draft											
087100 - DOOR HARDWARE	087100-2	0	Door Hardware product data	Product Information	Draft											
087100 - DOOR HARDWARE	087100-3	0	Door Hardware samples	Sample	Draft											
088000 - GLAZING	088000-1	0	Glazing product data	Product Information	Draft											
088000 - GLAZING	088000-2	0	Glazing glass samples	Sample	Draft											
088000 - GLAZING	088000-3	0	Glazing schedule	Other	Draft											
092216 - NON-STRUCTURAL METAL FRAMING	092216-1	0	Non Struct Metal Framing product data	Product Information	Draft											
092900 - GYPSUM BOARD	092900-1	0	Gypsum Board product data	Product Information	Draft											
095110 - Acoustical Panel Ceilings	095110-1	0	Acoustical Panels product data	Product Information	Draft											
095110 - Acoustical Panel Ceilings	095110-2	0	Acoustical Panel samples see spec	Sample	Draft											
102113 - Toilet Compartments	102113-1	0	Toilet Compartments product data	Product Information	Draft											



Spec Section	#	Rev.	Title	Type	Status	Responsible Contractor	Submit By	Received From	Received Date	Ball In Court	Approvers	Response	Sent Date	Returned Date	Final Due Date	Distributed Date	
102113 - Toilet Compartments	102113-2	0	Toilet Compartments shop drawings see spec	Shop Drawing	Draft												
102113 - Toilet Compartments	102113-3	0	Toilet Compartments samples	Sample	Draft												
102800 - TOILET ROOM ACCESSORIES	102800-1	0	Toilet Room Accessories product data	Product Information	Draft												
105113 - METAL LOCKERS	105113-1	0	Metal Lockers product data	Product Information	Draft												
105113 - METAL LOCKERS	105113-2	0	Metal Lockers shop drawings	Shop Drawing	Draft												
105113 - METAL LOCKERS	105113-3	0	Metal Lockers samples of colors	Sample	Draft												
107313 - AWNINGS	107313-1	0	Awnings product data	Product Information	Draft												
107313 - AWNINGS	107313-2	0	Awnings shop drawings see spec	Shop Drawing	Draft												
107313 - AWNINGS	107313-3	0	Awnings samples - see spec	Sample	Draft												

**Bid Division: 096500 – Flooring & Wall Tile**

**Bid to Include:**

**Total Responsibility for Specification Sections:**

Section 093013 – Ceramic Tile  
Section 096513 – Resilient Base and Accessories  
Section 096519 – Resilient Tile Flooring  
Section 096813 - Tile Carpeting

**Limited Responsibility for Specification Sections (as it relates to work in this Bid Division):**

Section 079200 – Joint Sealants (As it relates to work in this Bid Division)

**Provide all labor, materials, tools, and equipment necessary to perform the work of the specified bid sections. The contractor must also furnish, deliver, unload, store, protect, erect and install all items required for the completion of the work of this bid division in compliance with all drawings and specifications for a complete operational system including but not limited to:**

**General Inclusions:**

1. There is no general contractor associated with this project; any and all reference to a “general contractor” related to the work of this bid division shall be understood to mean the contractor of this bid division.
2. The contractor for this bid division work is required to include but is not limited to all items, services, tasks, materials, personnel, equipment, etc. identified in this bid division description regardless of the presence of language in other bid division descriptions that is the same or is similar to that found in this contractor’s bid division description.
3. Coordination of the work of this bid division with any and all work of other bid division contractors for the scheduling and integration of the work of this contractor.
4. All contractors are responsible for the entire set of plans and specifications; including tables, schedules, and notes.
5. Provide continuous housekeeping and clean-up, and proper legal off-site disposal of any debris generated by this Bid Division’s work.
6. Contractor is responsible for own dumpster(s) and all removal and disposal charges thereof. (Use of the Owner’s dumpsters is strictly prohibited.)
7. All Contractors are required to inspect the existing project components and are to include all work necessary to complete the work to deliver a fully operational system in compliance with all governing codes.
8. This Contractor shall be responsible for performing all work in full compliance with all health and safety standards including Asbestos Awareness and Notification, Lead Paint Abatement, and all MIOSHA Standards. This Contractor shall also be responsible for satisfying all safety violations and/or fines resulting from the actions or lack of action by this Contractor at the sole expense of this Contractor.
9. Any contractor who compounds a mistake by installing their product on another Contractor’s obvious faulty work will assume responsibility for repair of said work.
10. This contractor shall repair and restore any damaged area to an original or better condition with no detectable evidence that the area has been repaired. Repairs must be done by personnel qualified in the execution of the work skilled and licensed in that trade. Whenever possible, repairs to work shall be done by the original installer of the work.
11. Submittal of all insurance, unit pricing, schedule of values, required product data and shop drawings within (2) two weeks of Owner’s Notice to commence work.
12. Must provide all submittals within 20 working days of contract award or sooner, unless specifically clarified with the construction manager prior to contract award.
13. Provide all layout and measurements required to perform the work of this Bid Division.
14. The Owner reserves the right to salvage any materials removed from the site during the duration of the project.

**Bid Division: 096500 – Flooring & Wall Tile**

15. Coordinate delivery of materials with Construction Manager (48 hours) in advance of the delivery, and provide proper personnel and equipment to perform the unloading.
16. Contractor shall submit to the field construction manager a complete written daily field report stating the work being done on site and the number of employees performing the work for each day the Contractor has representatives on site.
17. Contractor shall have a supervisor on site at all times when a crew is present on the job.
18. On Friday, or last workday of each week, the Contractor must update the Master Copy of As-Builts, as it applies to the work of their Bid Division.
19. **Wolgast uses Procore for their CM Software. Please note: We will upload all drawings, and drawing revisions as they are approved, to the Drawings tool. However, it is each contractor's responsibility to verify that they are working from the most up-to-date, approved, drawings.**

**Division Inclusions:**

1. Preparation of existing areas to receive new flooring, install as shown and specified. (Prep is this Bid Division's responsibility.)
2. Strip, clean and finish all floors immediately prior to the Owner's occupancy.
3. Transition strips from new VCT to existing or new ceramic and/or carpet, and/or terrazzo.
4. Expansion and control joints as required by design and/or product manufacturer.
5. Follow finish schedule.
6. Clean and prepare floor including leveling and filling of voids prior to starting work.
7. Vacuum and spot clean carpet prior to Owner occupancy.
8. Provide and install all required base.
9. Furnish and install all caulking required for the work of this Bid Division.
10. Provide Owner with additional flooring for each type, color, pattern and size installed. (Per specifications)
11. Replacement and/or repair of defective and/or misaligned material installed by this contractor.
12. To repair any adjacent material damaged in the execution of the above listed work.
13. All adhesives.
14. Provide and install thresholds as required.

**Project Inclusions:**

1. Price all alternates
2. Include the supply and installation of tile backer board for alternate 4 in this bid division.
3. Please note the request for metal trim for new wall tile per elevations.

**Excludes:**

1. Floor Demolition

**Consideration for award:**

The ability to begin as soon as areas of work become available. To have proper equipment and responsible personnel to complete the above list of work. To repair any adjacent materials damaged in the execution of the above listed work. Close cooperation with the Construction Manager and other bid divisions to provide input to develop a working schedule. An approved schedule of values will be required before approval is granted for the first payment request. Expediting communication and follow-up as required.

END OF BID DIVISION 096500

**Wolgast Corporation – Construction Management**



**Submittal Packages**

Spec Section	#	Rev.	Title	Type	Status	Responsible Contractor	Submit By	Received From	Received Date	Ball In Court	Approvers	Response	Sent Date	Returned Date	Final Due Date	Distributed Date
<b>#5 09 65 00 - Flooring - Start Up</b>																
	1	0	Post Bid Interview/Proposal Forms		Draft											
	2	0	Schedule of Values		Draft											
	3	0	Contracts Signed/Returned		Draft											
	4	0	Payment/Performance Bonds		Draft											
	5	0	Insurance/Letter of Compl		Draft											
	6	0	On Site Employee List		Draft											
	7	0	Safety Policy		Draft											
	8	0	Safety Data Sheets (SDS)		Draft											
	9	0	Sub/Supplier Form		Draft											
	10	0	Hazardous/AHERA Notifications		Draft											
<b>#6 09 65 00 - Flooring - Close Out</b>																
	11	0	Contractor (2) Yr Guarantee		Draft											
	12	0	Consent of Surety		Draft											
	13	0	Substantial Completion		Draft											
	14	0	Completed Punch List		Draft											
	15	0	As Built Drawings		Draft											
	16	0	All CO Signed/Returned		Draft											
	17	0	Insurance Up-To-Date		Draft											
	18	0	Signed Hazardous Materials		Draft											
	19	0	Asbestos Materials Affidavits		Draft											
	20	0	Warranties for Equipment Installed		Draft											
	21	0	O&M Manuals		Draft											
093013 - CERAMIC TILING	093013-3	0	Ceramic Tile extra material see spec	Closeouts	Draft											
096519 - RESILIENT TILE FLOORING	096519-3	0	Resilient Tile maintenance data	Closeouts	Draft											
096519 - RESILIENT TILE FLOORING	096519-4	0	Resilient Tile extra material see spec	Closeouts	Draft											
096813 - Tile Carpeting	096813-3	0	Tile Carpet maintenance data	Closeouts	Draft											
096813 - Tile Carpeting	096813-4	0	Tile Carpet extra material see spec	Closeouts	Draft											
096813 - Tile Carpeting	096813-5	0	Tile Carpeting Warranty	Closeouts	Draft											
<b>#4 09 65 00 - Flooring</b>																
093013 - CERAMIC TILING	093013-1	0	Ceramic Tile product data	Product Information	Draft											
093013 - CERAMIC TILING	093013-2	0	Ceramic Tile samples see spec	Sample	Draft											
096513 - RESILIENT BASE AND ACCESSORIES	096513-1	0	Resilient Base and Accessories product data	Product Information	Draft											
096513 - RESILIENT BASE AND ACCESSORIES	096513-2	0	Resilient Base and Accessories samples see spec	Sample	Draft											
096519 - RESILIENT TILE FLOORING	096519-1	0	Resilient Tile product data	Product Information	Draft											
096519 - RESILIENT TILE FLOORING	096519-2	0	Resilient Tile samples	Sample	Draft											
096813 - Tile Carpeting	096813-1	0	Tile Carpet product data	Product Information	Draft											
096813 - Tile Carpeting	096813-2	0	Tile Carpet samples	Sample	Draft											

**Bid Division: 099000 – Painting**

**Bid to Include:**

**Total Responsibility for Specification Sections:**

Section 099123 – Interior Painting

**Limited Responsibility for Specification Sections (as it relates to work in this Bid Division):**

Section 079200 – Joint Sealants (Interior Control Joints and all dissimilar products)

**Provide all labor, materials, tools, and equipment necessary to perform the work of the specified bid sections. The contractor must also furnish, deliver, unload, store, protect, erect and install all items required for the completion of the work of this bid division in compliance with all drawings and specifications for a complete operational system including but not limited to:**

**General Inclusions:**

1. There is no general contractor associated with this project; any and all reference to a “general contractor” related to the work of this bid division shall be understood to mean the contractor of this bid division.
2. The contractor for this bid division work is required to include but is not limited to all items, services, tasks, materials, personnel, equipment, etc. identified in this bid division description regardless of the presence of language in other bid division descriptions that is the same or is similar to that found in this contractor’s bid division description.
3. Coordination of the work of this bid division with any and all work of other bid division contractors for the scheduling and integration of the work of this contractor.
4. All contractors are responsible for the entire set of plans and specifications; including tables, schedules, and notes.
5. Provide continuous housekeeping and clean-up, and proper legal off-site disposal of any debris generated by this Bid Division’s work.
6. Contractor is responsible for own dumpster(s) and all removal and disposal charges thereof. (Use of the Owner’s dumpsters is strictly prohibited.)
7. All Contractors are required to inspect the existing project components and are to include all work necessary to complete the work to deliver a fully operational system in compliance with all governing codes.
8. This Contractor shall be responsible for performing all work in full compliance with all health and safety standards including Asbestos Awareness and Notification, Lead Paint Abatement, and all MIOSHA Standards. This Contractor shall also be responsible for satisfying all safety violations and/or fines resulting from the actions or lack of action by this Contractor at the sole expense of this Contractor.
9. Any contractor who compounds a mistake by installing their product on another Contractor’s obvious faulty work will assume responsibility for repair of said work.
10. This contractor shall repair and restore any damaged area to an original or better condition with no detectable evidence that the area has been repaired. Repairs must be done by personnel qualified in the execution of the work skilled and licensed in that trade. Whenever possible, repairs to work shall be done by the original installer of the work.
11. Submittal of all insurance, unit pricing, schedule of values, required product data and shop drawings within (2) two weeks of Owner’s Notice to commence work.
12. Must provide all submittals within 20 working days of contract award or sooner, unless specifically clarified with the construction manager prior to contract award.
13. Provide all layout and measurements required to perform the work of this Bid Division.
14. The Owner reserves the right to salvage any materials removed from the site during the duration of the project.
15. Coordinate delivery of materials with Construction Manager (48 hours) in advance of the delivery, and provide proper personnel and equipment to perform the unloading.

**Bid Division: 099000 – Painting**

16. Contractor shall submit to the field construction manager a complete written daily field report stating the work being done on site and the number of employees performing the work for each day the Contractor has representatives on site.
17. Contractor shall have a supervisor on site at all times when a crew is present on the job.
18. On Friday, or last workday of each week, the Contractor must update the Master Copy of As-Built, as it applies to the work of their Bid Division.
19. **Wolgast uses Procore for their CM Software. Please note: We will upload all drawings, and drawing revisions as they are approved, to the Drawings tool. However, it is each contractor's responsibility to verify that they are working from the most up-to-date, approved, drawings.**

**Division Inclusions:**

1. Follow room finish and door schedules.
2. Painting of all electrical and mechanical lines and equipment (as specified).
3. Paint all bulkheads.
4. All surfaces to be painted, including but not limited to drywall and masonry, are to be inspected and accepted by this contractor prior to application of paint. Surface imperfections not repaired prior to painting or submitted to the construction manager in writing as existing defects prior to painting, will be repaired by the painting contractor at no additional cost.
5. Painting Contractor is responsible for removing or protecting all cover plates, trim and other pre-finished surfaces necessary for the completion of this work scope. This Contractor is responsible for replacing anything removed upon completion of work.
6. Provide final cleaning of work prior to Owner occupancy.
7. Furnish and install all caulking required for the work of this Bid Division.
8. To repair any adjacent material damaged in the execution of the above listed work.
9. All caulking of interior control joints
10. All caulking of interior joints between any and all dissimilar surfaces including door and window frames, CMU & Drywall.
11. Clean, dust and dirt off bar joist, deck and ductwork prior to painting.

**Project Inclusions:**

1. Price all alternates
2. For alternate 3 include epoxy painting of the toilet rooms.
3. Paint all walls, ceilings, doors, and frames as noted on the drawings.
4. See General Notes on A3.01, number 11 that all wall mounted mechanical equipment is to be painted.

**Consideration for award:**

The ability to begin as soon as areas of work become available. To have proper equipment and responsible personnel to complete the above list of work. To repair any adjacent materials damaged in the execution of the above listed work. Close cooperation with the Construction Manager and other bid divisions to provide input to develop a working schedule. An approved schedule of values will be required before approval is granted for the first payment request. Expediting communication and follow-up as required.

END OF BID DIVISION 099000





**Submittal Packages**

Spec Section	#	Rev.	Title	Type	Status	Responsible Contractor	Submit By	Received From	Received Date	Ball In Court	Approvers	Response	Sent Date	Returned Date	Final Due Date	Distributed Date
<b>#8 09 90 00 - Painting - Start Up</b>																
	1	0	Post Bid Interview/Proposal Forms		Draft											
	2	0	Schedule of Values		Draft											
	3	0	Contracts Signed/Returned		Draft											
	4	0	Payment/Performance Bonds		Draft											
	5	0	Insurance/Letter of Compl		Draft											
	6	0	On Site Employee List		Draft											
	7	0	Safety Policy		Draft											
	8	0	Safety Data Sheets (SDS)		Draft											
	9	0	Sub/Supplier Form		Draft											
	10	0	Hazardous/AHERA Notifications		Draft											
<b>#9 09 90 00 - Painting - Close Out</b>																
	11	0	Contractor (2) Yr Guarantee		Draft											
	12	0	Consent of Surety		Draft											
	13	0	Substantial Completion		Draft											
	14	0	Completed Punch List		Draft											
	15	0	As Built Drawings		Draft											
	16	0	All CO Signed/Returned		Draft											
	17	0	Insurance Up-To-Date		Draft											
	18	0	Signed Hazardous Materials		Draft											
	19	0	Asbestos Materials Affidavits		Draft											
	20	0	Warranties for Equipment Installed		Draft											
	21	0	O&M Manuals		Draft											
<b>#7 09 90 00 - Painting</b>																
099123 - INTERIOR PAINTING	099123-1	0	Interior Paint product data	Product Information	Draft											
099123 - INTERIOR PAINTING	099123-2	0	Interior Paint samples	Sample	Draft											

**Bid Division: 222300 – Plumbing & HVAC Systems**

**Bid to Include:**

**Total Responsibility for Specification Sections:**

See Drawings for Specifications

**Provide all labor, materials, tools, and equipment necessary to perform the work of the specified bid sections. The contractor must also furnish, deliver, unload, store, protect, erect and install all items required for the completion of the work of this bid division in compliance with all drawings and specifications for a complete operational system including but not limited to:**

**Bid Division: 222300 – Plumbing & HVAC Systems**

**General Inclusions:**

1. There is no general contractor associated with this project; any and all reference to a “general contractor” related to the work of this bid division shall be understood to mean the contractor of this bid division.
2. The contractor for this bid division work is required to include but is not limited to all items, services, tasks, materials, personnel, equipment, etc. identified in this bid division description regardless of the presence of language in other bid division descriptions that is the same or is similar to that found in this contractor’s bid division description.
3. Coordination of the work of this bid division with any and all work of other bid division contractors for the scheduling and integration of the work of this contractor.
4. All contractors are responsible for the entire set of plans and specifications; including tables, schedules, and notes.
5. Provide continuous housekeeping and clean-up, and proper legal off-site disposal of any debris generated by this Bid Division’s work.
6. Contractor is responsible for own dumpster(s) and all removal and disposal charges thereof. (Use of the Owner’s dumpsters is strictly prohibited.)
7. All Contractors are required to inspect the existing project components and are to include all work necessary to complete the work to deliver a fully operational system in compliance with all governing codes.
8. This Contractor shall be responsible for performing all work in full compliance with all health and safety standards including Asbestos Awareness and Notification, Lead Paint Abatement, and all MIOSHA Standards. This Contractor shall also be responsible for satisfying all safety violations and/or fines resulting from the actions or lack of action by this Contractor at the sole expense of this Contractor.
9. Any contractor who compounds a mistake by installing their product on another Contractor’s obvious faulty work will assume responsibility for repair of said work.
10. This contractor shall repair and restore any damaged area to an original or better condition with no detectable evidence that the area has been repaired. Repairs must be done by personnel qualified in the execution of the work skilled and licensed in that trade. Whenever possible, repairs to work shall be done by the original installer of the work.
11. Submittal of all insurance, unit pricing, schedule of values, required product data and shop drawings within (2) two weeks of Owner’s Notice to commence work.
12. Must provide all submittals within 20 working days of contract award or sooner, unless specifically clarified with the construction manager prior to contract award.
13. Provide all layout and measurements required to perform the work of this Bid Division.
14. The Owner reserves the right to salvage any materials removed from the site during the duration of the project.
15. Coordinate delivery of materials with Construction Manager (48 hours) in advance of the delivery, and provide proper personnel and equipment to perform the unloading.
16. Contractor shall submit to the field construction manager a complete written daily field report stating the work being done on site and the number of employees performing the work for each day the Contractor has representatives on site.
17. Contractor shall have a supervisor on site at all times when a crew is present on the job.

**Wolgast Corporation – Construction Management**

**Bid Division: 222300 – Plumbing & HVAC Systems**

18. On Friday, or last workday of each week, the Contractor must update the Master Copy of As-Built, as it applies to the work of their Bid Division.
19. **Wolgast uses Procore for their CM Software. Please note: We will upload all drawings, and drawing revisions as they are approved, to the Drawings tool. However, it is each contractor's responsibility to verify that they are working from the most up-to-date, approved, drawings.**

**Division Inclusions:**

1. Provide all blocking required for plumbing fixture mounting.
2. Perform all connections between site utilities and building, coordinate with site contractor on utilities.
3. Removal of all plumbing and heating fixtures.
4. Furnish and install all fixtures in cabinetry as required.
5. Provide all final connections and hook-ups for kitchen equipment.
6. Furnish all louvers and access panels to masonry and drywall contractors for installation.
7. Perform all excavating, backfill, compaction, and remove spoils required for the work of this bid division.
8. Furnish and install duct detectors, back draft dampers, etc. as shown and specified, and/or required by Code.
9. Provide all final plumbing hook-ups to all plumbing related fixtures and equipment.
10. Maintain fire rating in all walls penetrated.
11. Provide all required layout and verify that no conflict occurs with other trades.
12. Provide all necessary connection between temperature control and instrumentation devices and equipment to be controlled.
13. Provide roof curbs for rooftop equipment.
14. Provide all permits required.
15. Provide all required work to prepare each piece of equipment to receive and allow for proper installation and operation of the temperature control modules and related automatic temperature control devices.
16. Provide temporary water distribution as required.
17. Furnish test and balance reports.
18. Contractor shall coordinate phased delivery of all pre-purchased equipment with supplier.
19. Contractor shall maintain existing HVAC systems in fully functional order in occupied areas of the building throughout the duration of the project.
20. Remove, clean and reinstall all existing grids, vents, registers and diffusers including those mounted in metal ceiling grid systems.

**Project Inclusions:**

1. Price all alternates
2. Please note that in alternate 4 tile backer and new tile is being installed over existing wall covering and new fixtures will need to be installed accordingly.
3. Include all plumbing and mechanical removals noted per the drawings.
4. Include removal and reinstallation of diffuser and grills as required for new ceilings.
5. Supply and install new plumbing fixtures as noted.
6. Supply and install new HVAC as noted. Including exhaust fans, cabinet heater, fine tube radiator, and roof top unit.
7. Supply and install required roof top curbs and required roof flashing to complete your work. This will not be by the General Trades Contractor.
8. Include cutting openings in roof deck to complete your work. Roof pathing and or flashing is also by this contractor.

**Consideration for award:**

The ability to begin as soon as areas of work become available. To have proper equipment and responsible personnel to complete the above list of work. To repair any adjacent materials damaged in the execution of the above listed work. Close cooperation with the Construction Manager and other bid divisions to provide input to develop a working schedule. An approved schedule of values will be required before approval is granted for the first payment request. Expediting communication and follow-up as required.



**Submittal Packages**

Spec Section	#	Rev.	Title	Type	Status	Responsible Contractor	Submit By	Received From	Received Date	Ball In Court	Approvers	Response	Sent Date	Returned Date	Final Due Date	Distributed Date
<b>#10 22 23 00 - Plumbing &amp; HVAC Systems</b>																
	1	0	Product Data for all products installed - see drawings		Draft											
	2	0	Shop Drawings - see drawings		Draft											
	3	0	Samples - see drawings		Draft											
<b>#11 22 23 00 - Plumbing &amp; HVAC Systems - Start Up</b>																
	4	0	Post Bid Interview/Proposal Forms		Draft											
	5	0	Schedule of Values		Draft											
	6	0	Contracts Signed/Returned		Draft											
	7	0	Payment/Performance Bonds		Draft											
	8	0	Insurance/Letter of Compl		Draft											
	9	0	On Site Employee List		Draft											
	10	0	Safety Policy		Draft											
	11	0	Safety Data Sheets (SDS)		Draft											
	12	0	Sub/Supplier Form		Draft											
	13	0	Hazardous/AHERA Notifications		Draft											
	14	0	Copy of Permits		Draft											
<b>#12 22 23 00 - Plumbing &amp; HVAC Systems - Close Out</b>																
	15	0	Contractor (2) Yr Guarantee		Draft											
	16	0	Consent of Surety		Draft											
	17	0	Substantial Completion		Draft											
	18	0	Completed Punch List		Draft											
	19	0	As Built Drawings		Draft											
	20	0	All CO Signed/Returned		Draft											
	21	0	Insurance Up-To-Date		Draft											
	22	0	Signed Hazardous Materials		Draft											
	23	0	Asbestos Materials Affidavits		Draft											
	24	0	Warranties for Equipment Installed		Draft											
	25	0	O&M Manuals		Draft											
	26	0	Copy of Final Inspections for Permits		Draft											

**Bid Division: 260000 – Electrical**

**Bid to Include:**

**Total Responsibility for Specification Sections:**

See Drawings for Specifications

**Provide all labor, materials, tools, and equipment necessary to perform the work of the specified bid sections. The contractor must also furnish, deliver, unload, store, protect, erect and install all items required for the completion of the work of this bid division in compliance with all drawings and specifications for a complete operational system including but not limited to:**

**General Inclusions:**

1. There is no general contractor associated with this project; any and all reference to a “general contractor” related to the work of this bid division shall be understood to mean the contractor of this bid division.
2. The contractor for this bid division work is required to include but is not limited to all items, services, tasks, materials, personnel, equipment, etc. identified in this bid division description regardless of the presence of language in other bid division descriptions that is the same or is similar to that found in this contractor’s bid division description.
3. Coordination of the work of this bid division with any and all work of other bid division contractors for the scheduling and integration of the work of this contractor.
4. All contractors are responsible for the entire set of plans and specifications; including tables, schedules, and notes.
5. Provide continuous housekeeping and clean-up, and proper legal off-site disposal of any debris generated by this Bid Division’s work.
6. Contractor is responsible for own dumpster(s) and all removal and disposal charges thereof. (Use of the Owner’s dumpsters is strictly prohibited.)
7. All Contractors are required to inspect the existing project components and are to include all work necessary to complete the work to deliver a fully operational system in compliance with all governing codes.
8. This Contractor shall be responsible for performing all work in full compliance with all health and safety standards including Asbestos Awareness and Notification, Lead Paint Abatement, and all MIOSHA Standards. This Contractor shall also be responsible for satisfying all safety violations and/or fines resulting from the actions or lack of action by this Contractor at the sole expense of this Contractor.
9. Any contractor who compounds a mistake by installing their product on another Contractor’s obvious faulty work will assume responsibility for repair of said work.
10. This contractor shall repair and restore any damaged area to an original or better condition with no detectable evidence that the area has been repaired. Repairs must be done by personnel qualified in the execution of the work skilled and licensed in that trade. Whenever possible, repairs to work shall be done by the original installer of the work.
11. Submittal of all insurance, unit pricing, schedule of values, required product data and shop drawings within (2) two weeks of Owner’s Notice to commence work.
12. Must provide all submittals within 20 working days of contract award or sooner, unless specifically clarified with the construction manager prior to contract award.
13. Provide all layout and measurements required to perform the work of this Bid Division.
14. The Owner reserves the right to salvage any materials removed from the site during the duration of the project.
15. Coordinate delivery of materials with Construction Manager (48 hours) in advance of the delivery, and provide proper personnel and equipment to perform the unloading.
16. Contractor shall submit to the field construction manager a complete written daily field report stating the work being done on site and the number of employees performing the work for each day the Contractor has representatives on site.
17. Contractor shall have a supervisor on site at all times when a crew is present on the job.
18. On Friday, or last workday of each week, the Contractor must update the Master Copy of As-Builts, as it applies to the work of their Bid Division.

**Bid Division: 260000 – Electrical**

19. **Wolgast uses Procore for their CM Software. Please note: We will upload all drawings, and drawing revisions as they are approved, to the Drawings tool. However, it is each contractor's responsibility to verify that they are working from the most up-to-date, approved, drawings.**

**Division Inclusions:**

1. Contractor shall maintain existing electrical systems in fully functional order in all areas of the building during the duration of the project.
2. Contractor shall furnish and install temporary insulated weather-tight closures of openings created as a result of the work in this scope in exterior surfaces to provide acceptable working conditions and protection for materials, to allow temporary heating, and building security.
3. Contractor is responsible for disconnecting, removing and legal and proper off site disposal of all indicated existing light fixtures including ballasts and bulbs. Ballasts shall be assumed to contain PCB's. Provide Owner with appropriate documentation of disposal.
4. Remove, clean and reinstall light fixtures where indicated.
5. Provide all permits required.
6. Maintain fire rating at all walls penetrated.
7. All excavation, backfill, compaction, and disposal of spoil for any electrical work placed below finish grade.
8. Coordinate with other trades for rough-in locations.
9. Provide temporary lighting and power distribution. A minimum of 100 watts of temporary lighting per 250 SF of floor area.
10. Provide all plywood or nailers required for mounting of electrical, audio, fire alarm or phone equipment.
11. Furnish any access hatches to mason and drywall contractors for installation required for electrical work.
12. Final hook-up of all equipment for other disciplines of work.
13. Furnish and install all light and power fixtures in cabinetry.
14. Provide all final connection for kitchen equipment.
15. Supply and install a complete & operational fire protection alarm system.
16. Contractor is responsible for complete code compliance of Fire Alarm System.
17. Provide shop drawings to State Fire Marshal Plan Review or governing authority (allowing sufficient time for changes that may be made and must be completed prior to beneficial occupancy.)
18. Install pull box and chase conduit for temp control.

**Project Inclusions:**

1. Price all alternates
2. Include all electrical removals called out on the drawings.
3. Include all electrical and electrical fixtures.
4. Include fire alarm as noted on the drawings including door holds.
5. Include phone intercom station.
6. Provide and install new intercom and camera device rough-in.
7. Provide pathway for reception desk button.

**Consideration for award:**

The ability to begin as soon as areas of work become available. To have proper equipment and responsible personnel to complete the above list of work. To repair any adjacent materials damaged in the execution of the above listed work. Close cooperation with the Construction Manager and other bid divisions to provide input to develop a working schedule. An approved schedule of values will be required before approval is granted for the first payment request. Expediting communication and follow-up as required.

**END OF BID DIVISION 260000**

**Wolgast Corporation – Construction Management**



**Submittal Packages**

Spec Section	#	Rev.	Title	Type	Status	Responsible Contractor	Submit By	Received From	Received Date	Ball In Court	Approvers	Response	Sent Date	Returned Date	Final Due Date	Distributed Date
<b>#13 26 00 00 - Electrical</b>																
	1	0	Product Data for all products installed - see drawings		Draft											
	2	0	Shop Drawings - see drawings		Draft											
	3	0	Samples - see drawings		Draft											
<b>#14 26 00 00 - Electrical - Start Up</b>																
	4	0	Post Bid Interview/Proposal Forms		Draft											
	5	0	Schedule of Values		Draft											
	6	0	Contracts Signed/Returned		Draft											
	7	0	Payment/Performance Bonds		Draft											
	8	0	Insurance/Letter of Compl		Draft											
	9	0	On Site Employee List		Draft											
	10	0	Safety Policy		Draft											
	11	0	Safety Data Sheets (SDS)		Draft											
	12	0	Sub/Supplier Form		Draft											
	13	0	Hazardous/AHERA Notifications		Draft											
	14	0	Copy of Permits		Draft											
<b>#15 26 00 00 - Electrical - Close Out</b>																
	15	0	Contractor (2) Yr Guarantee		Draft											
	16	0	Consent of Surety		Draft											
	17	0	Substantial Completion		Draft											
	18	0	Completed Punch List		Draft											
	19	0	As Built Drawings		Draft											
	20	0	All CO Signed/Returned		Draft											
	21	0	Insurance Up-To-Date		Draft											
	22	0	Signed Hazardous Materials		Draft											
	23	0	Asbestos Materials Affidavits		Draft											
	24	0	Warranties for Equipment Installed		Draft											
	25	0	O&M Manuals		Draft											
	26	0	Final Inspections for Permits		Draft											

**PART 1 – GENERAL**

**1.01 DEFINITION**

- A. Clarification Request forms shall be used to document all questions regarding bidding documents and technical specifications. Please use **ONE** Clarification Form for each item.
- B. The Clarification Request form follows as page 2 of this Section.

**1.02 PREPARATION OF CLARIFICATION REQUEST FORM**

- A. The Contractor shall complete the following items on the Clarification Request form:
  - 1. Date
  - 2. Contractor Name
  - 3. Contractor contact person
  - 4. Contractor email, phone, and fax number
  - 5. Item(s) for clarification
- B. The Contractor shall forward the Clarification Request form, via fax or email, to the Construction Manager **no later than 5 days prior to bid due date**. Requests from bidders for clarification, or interpretation of the bidding documents must reach the Project Team five days before the bid date, or by the date addressed in the pre-bid agenda. Any bidder clarifications which reach the project team after such dates have passed will not be considered.

**1.03 RESPONSIBILITIES FOR COMPLETION OF CLARIFICATION REQUEST FORMS**

- A. The Construction Manager shall review and number Clarification Request forms as they are received.
- B. Clarification Requests regarding BIDDING INSTRUCTIONS OR PROCEDURES shall be answered by the Construction Manager.
- C. Clarification Requests regarding the DESIGN and/or TECHNICAL SPECIFICATIONS shall be answered by the Architect. The Construction Manager shall forward technical specification clarifications to the Architect, via fax or mail, as they are received.

**1.04 RESPONSE TO CLARIFICATION REQUEST FORMS**

- A. The Architect shall review each Clarification Request form received and return responses to the Construction Manager.
- B. As noted in Items 1.03.B and 1.03.C above, it is the responsibility of both the Construction Manager and the Architect to respond to Clarification Request forms.
- C. Responses shall be issued via the “Response” section of the Clarification Request form or Addenda.



**CLARIFICATION REQUEST FORM**

Date: \_\_\_\_\_

Wolgast Clarification Request  
#: \_\_\_\_\_

To: Wolgast Corporation  
**Dale Schwerin (dschwerin@wolgast.com)** or **Lisa Donahue (ldonahue@wolgast.com)**  
4835 Towne Centre Road, Suite 203  
Saginaw, MI 48604  
Phone (989) 790-9120, Fax (989) 790-9063

From: \_\_\_\_\_  
Contractor Name  
\_\_\_\_\_  
Contact Name  
\_\_\_\_\_  
Email Address  
\_\_\_\_\_  
Phone # \_\_\_\_\_ Fax # \_\_\_\_\_

Bid Division # and Name: \_\_\_\_\_

CSI Code (If Applicable): \_\_\_\_\_

Drawing #: \_\_\_\_\_ Detail or Item #: \_\_\_\_\_

Reason for Request:  More Detail Needed  Engineering Clarification  Alternate Proposal  Other

Project: **Bay City Public Schools**

Site Location: **Eastern HS at Handy MS**

**ITEM(S) FOR CLARIFICATION OF BID: (Please use one form for each item)**

Please review and respond to the following item(s) for clarification:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**RESPONSE:**  ITEM TO BE INCLUDED IN ADDENDUM

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Construction Manager: \_\_\_\_\_  
Signature Date

Architect: \_\_\_\_\_  
Signature Date

**END OF SECTION 00310**

**PART 1 – GENERAL**

**1.01 BID SECURITY**

- A. Each Proposal shall be accompanied by Bid Security pledging that the Bidder will enter into a contract with the Owner on the terms stated in the Proposal, and will, if required, furnish bonds as described in Section 00600. Should the Bidder refuse to enter into such contract or fail to furnish such Bonds, the amount of the Bid Security shall be forfeited to the Owner as liquidated damages, not as a penalty.
- B. Bid Security shall be in the amount of five percent (5%) of the Base Bid(s).
- C. Bid Security for each Proposal containing Bids for multiple Bid Divisions shall be in the amount of five percent (5%) of the total Base Bids for the highest-priced combination of Bid Divisions included in the Proposal.
- D. Bid Security may take the form of a **Bid Bond, a Cashier's Check, or a Money Order made payable to the Owner.** When submitting a Cashier's Check or Money Order a separate check or money order must accompany each Bid Division.
- E. Bid Security that is in the form of a Cashier's Check or Money Order will be returned to Bidders within a reasonable period after construction contracts have been executed, returned, and approved by the Owner.

**END OF SECTION 00410**

**PART 1 – GENERAL**

**1.01 OWNER/CONTRACTOR AGREEMENT**

- A. The Agreement between the Owner and the Contractor will be written on the Owner's standard Owner/Contractor Agreement Form. A sample of this Form appears as Section 00510.
- B. The Owner/Contractor Agreement Form will be filled in by the Owner, as appropriate for each Contractor and will be sent to each Contractor.
- C. The executed Owner/Contractor Agreement, the General Conditions and the other Contract Documents will be the entire, integrated Contract between the Owner and each Contractor.
- D. Upon receipt of an Owner/Contractor Agreement, each successful Bidder shall review it for completeness and accuracy, execute it and return it to the Owner's Representative for delivery to the Owner.
- E. Each successful Bidder shall submit all required post-bid documents, including Labor and Material Payment Bond and Performance Bond (Section 00600) unless waived by the Owner, Certificates of Insurance (Section 00650), Schedule of Values (Section 00670), Subcontractor and Supplier Listing (Section 00680), and Employee Listing (Section 00690) as a prerequisite to execution of the Owner/Contractor Agreement
- F. The Owner will execute each Owner/Contractor Agreement after it has been properly executed by the Bidder and after all required post-bid documents have been submitted.

**1.02 NOTICE TO PROCEED**

- A. The Owner may elect to issue Notices to Proceed prior to the execution of Owner/Contractor Agreements.
- B. Upon receipt of Notice to Proceed, each Contractor shall commence work in accord with the conditions contained in the Notice to Proceed
- C. Regardless of the provisions of any Notice to Proceed or of this Section, no Contractor shall commence work until all required insurance is in force and Certificates of Insurance (Section 00650) have been submitted to the Owner's Representative for delivery to the Owner.
- D. Prior to commencement of work, Contractors shall submit evidence satisfactory to the Owner that required bonds will be furnished and shall deliver the Bonds by the date the Contractor executes the Owner/Contractor Agreement.
- E. The Owner may include Notice to Proceed in Purchase Orders.

**1.03 COMMENCEMENT OF WORK**

- A. Each Contractor shall commence work immediately upon receipt of Notice to Proceed under the conditions contained in the Notice to Proceed or upon execution of an Owner/Contractor Agreement, whichever is earlier.

**END OF SECTION 00500**

**SAMPLE  
OWNER-CONTRACTOR  
CONTRACT ON  
FOLLOWING PAGE**

END OF SECTION 00510



# Document A132™ - 2009

## **Standard Form of Agreement between Owner and Contractor, Construction Manager as Adviser Edition**

**AGREEMENT** made as of the «Day» of «Month»  
in the year «Year»  
(in words, indicate day, month and year)

**BETWEEN** the owner:  
(Name, legal status, address and other information)  
«Owner Name»  
«Owner Address»  
«Owner CSZ»

and the Contractor:  
(Name, legal status, address and other information)  
«Contractor»  
«Address»  
«CSZ»

for the following Project:  
(Name, legal status, address and other information)  
«Project Description»  
«Project Name»  
«Project Address»  
«Project CSZ»

«Bid Division» - «Description»

The Construction Manager is:  
(Name, legal status, address and other information)  
Wolgast Corporation  
Executive One Building  
4835 Towne Centre Road, Suite 203  
Saginaw, MI 48604

The Architect is:  
(Name, legal status, address and other information)  
«Architect Name»  
«Architect Address»  
«Architect CSZ»

The Owner and Contractor agree as set forth below.

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

This document is intended to be used in conjunction with AIA Documents A232™- 2009, General Conditions of the Contract for Construction. Construction Manager as Adviser Edition: B132™- 2009, Standard Form of Agreement Between Owner and Architect, Construction Manager as Adviser Edition; and C132™- 2009, Standard Form of Agreement Between Owner and Construction Manager as Adviser.

AIA Document A232™- 2009 is adopted in this document by reference. Do not use with other general conditions unless this document is modified.



- 2.6** Project Start Date: «Project Start Date»
- 2.7** Completion Date: «Completion Date»
- 2.8** All submittals and shop drawings required by the specifications must be submitted by:  
«Submittals Due By»
- 2.9** Provide all clean-up and legal off-site disposal of all debris generated by any work performed by this Contract including general housekeeping of employee generated trash and garbage (i.e. drink cups, food wrappers, bag, etc.)
- 2.10** The Bid Division Description(s) identify the scope of work, areas of responsibility and specific work to be included in the Contract Amount. If any conflict is found between the architect/engineer specifications and the Bid Descriptions regarding the scope of work to be performed, the Bid Division(s) Description shall govern. Further, if a conflict occurs between the Bidding Requirements, the General Requirements, the Specifications, the Bid Division(s) Descriptions, the Drawings, or the Addenda, the most stringent requirement shall apply.
- 2.11** Other Special provisions: Article 8.6
- 2.12** Compliance with EPA AHERA for Asbestos – The Contractor must adhere to all EPA AHERA and Michigan State Asbestos Regulations for Asbestos and other hazardous materials.
- 2.13** Compliance with Lead-Containing Materials – ALL Contractors, Subcontractors and Sub-Subcontractors shall adhere to the Environmental Protection Agency (EPA) lead-based paint regulation titled the “Renovation, Repair and Paint (RRP) Rule”. Included under this law are “Child Occupied Facilities” (COFs). COFs encompass locations of pre-1978 constructed buildings where children under age six (6) regularly visit, such as kindergarten rooms, 1<sup>st</sup> grade classrooms, applicable restrooms, pre-school and day care centers. Therefore portions of each pre 1978 constructed school building falls under the RRP Rule. Any contractor working on this project who disturbs painted surfaces in COF spaces shall ensure that they adhere to all aspects of the RRP Rule. This included but is not limited to meeting the requirements for being a Certified Firm, having a Certified Lead Renovator involved and following applicable lead safe work practices. Furthermore, all Contractors shall be responsible to comply with all applicable Federal and Michigan State lead regulations including, but not limited to, 29CFR Part 1926.62 of the OSHA Lead Construction Standards, (Part 603 of the Michigan State Standards). All costs associated with regulatory compliance shall be borne by the Contractor.
- 2.14** This Contractor is responsible for all safety issues for all work that he has effected until his project is complete.

**ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION**

**§3.1** The date of commencement of the Work shall be the date of this Agreement unless a different date is stated below or provision is made for the date to be fixed in a notice to proceed issued by the Owner.  
*(Insert the date of commencement; if it differs from the date of this Agreement or, if applicable, state that the date will be fixed in a notice to proceed.)*

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

**§3.3** The Contractor shall achieve Substantial Completion of the entire Work not later than and as follows: See Milestone Schedule for details.  
*(Insert number of calendar day. Alternatively, a calendar date may be used when coordinated with the date of commencement. If appropriate, insert requirements for earlier Substantial Completion of certain portions of the Work.)*

<b>Portion of the Work</b>	<b>Substantial Completion Date</b> <u>«Substantial Completion Date»</u>	<b>Final Completion</b>
----------------------------	--	-------------------------

, subject to adjustment of this Contract Time as provided in the Contract Documents  
*(Insert provisions, if any, for liquidated damages relating to failure to achieve Substantial Completion on time or for bonus payments for early completion of the Work.)*

**3.3.1** The Contractor agrees that time is of the essence and to start work when directed by the Construction Manager and to furnish sufficient materials and a sufficient number of properly skilled workers, so as not to delay the work of any other Contractor or completion of the project.

**ARTICLE 4 CONTRACT SUM**

**§4.1** The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor’s performance of the Contract. The Contract Sum shall be as follows:

(Check the appropriate box.)

- Stipulated Sum, in accordance with Section 4.2 below:
- Cost of the work plus the Contractor’s Fee without a Guaranteed Maximum Price, in accordance with Section 4.3 below:
- Cost of the Work plus the Contractor’s Fee with a Guaranteed Maximum Price, in accordance with Section 4.4 below

(Based on the selection above, complete Section 4.2, 4.3 or 4.4 below. Based on the selection above, also complete either Section 5.1.4, 5.1.5 or 5.1.6 below.)

**§4.2 Stipulated Sum**

**§4.2.1** The Stipulated Sum shall be «Contract Amount»Dollars (\$«Contract Amount »), subject to additions and deletions as provided in the Contract Documents.

Insert A: Contract amount includes: Base Bid \$«Base Bid», PLM Bond Amount \$«Bond Amount», Alternates \$«Alternate» totaling \$«Contract Amount ».

**§4.2.2** The Stipulated Sum is based on the following alternates, if any, which are described in the Contract Documents and are hereby accepted by the Owner:

(State the numbers or other identification of accepted alternates. If the bidding or proposal documents permit the Owner to accept other alternates subsequent to the execution of this Agreement, attach a schedule of such other alternates showing the amount for each and the date when that amount expires.)

«Alternate Description»

**§4.2.3** Unit prices, if any:

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

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

**§4.2.3** Allowances included in the Stipulated Sum, if any:

(Identify allowance and state exclusions, if any, from the allowance price.)

Item	Allowance
------	-----------

**ARTICLE 5 PAYMENTS**

**§5.1 Progress Payments**

**§5.1.1** ~~The Construction Manager will provide a Contractor Invoice Form to the Contractor for submitting the Contractor’s request for payment each month. All reference to “Application for Payment” or “Progress Payment Request” shall mean “Contractor Invoice Form”. Based upon Applications for Payment submitted to the Construction Manager by the Contractor and upon certification of the Project Application and Project Certificate for Payment or Application for Payment and Certificate of Payment by the Construction Manager and Architect and issuance by the Architect, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.~~

**§5.1.2** The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows: See “Contractor Invoice Form Due Date” Attachment “A”

**§5.1.3** Provided an Application for Payment is received by the Construction Manager not later than the “Contractor Invoice Form Due Date” found on Attachment “A” ~~day of the month~~ the Owner shall make payment of the certified amount in the Application for Payment to the Contractor for all undisputed amounts not later than forty-five (45) days of the month after the “Owner Approves Invoice” date found on Attachment “A”. If an Application for Payment is received by the Construction Manager after the application date fixed above, payment for all undisputed

AIA Document A132™ – 2009 (formerly A101™ CMA – 1992). Copyright © 1975, 1980, 1992 and 2009 by The American Institute of Architects. All rights reserved. WARNING: This AIA® Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of the AIA® Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. Purchasers are permitted to reproduce ten (10) copies of this document when completed. To report copyright violations of this AIA Contract Documents, email The American Institute of Architects' legal counsel, copyright@aia.org.



amounts shall be made by the Owner ~~not later than ( ) days~~ after the Construction Manager receives the Application for Payment **and at the payment date for the Applications for Payment of the following month.** (Federal, state or local laws may require payment within a certain period of time.)

#### **§5.1.4 Progress Payments Where the Contract Sum is Based on a Stipulated Sum**

**§5.1.4.1** ~~Each Application for Payment~~ Contractor Invoicing Form and CM prepared Progress Payment Request Form shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work and be prepared in such form and supported by such data to substantiate its accuracy as the Construction Manager and Architect may require. This schedule, unless objected to by the Construction Manager ~~or Architect~~, shall be used as a basis for reviewing the Contractor's ~~Applications for Payment~~. Invoicing Form and CM prepared Progress Payment Form.

**§5.1.4.2** ~~Applications for Payment~~ The Contractor Invoicing Form shall indicate the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

**§5.1.4.3** Subject to the provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

- .1 Take that portion of the Contract Sum properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the total Contract Sum allocated to that portion of the Work in the schedule of values, less retainage of ten percent (10%). Pending final determination of cost to the Owner of changes in the Work, amounts not in dispute may be included as provided in Section 7.3.9 of the General Conditions;
- .2 Add that portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing), less retainage of ten percent (10%);
- .3 Subtract the aggregate of previous payments made by the Owner; and
- .4 Subtract amounts, if any, for which the Construction Manager or Architect has withheld or nullified a Certificate for Payment as provided in Section 9.5 of the General Conditions.

**§5.1.4.4** The progress payments amount determined in accordance with Section 5.1.4.3 shall be further modified under the following circumstances:

- .1 Add, upon Substantial Completion of the Work, a sum sufficient to increase the total payments to ninety percent (90%) of the Contract Sum, less such amounts as the Construction Manager **and Owner** recommends and ~~the Architect~~ determines for incomplete Work and unsettled claims; and
- .2 Add, if final completion of the Work is thereafter materially delayed through no fault of the Contractor, any additional amounts payable in accordance with Section 9.10.3 of the General Conditions.

**§5.1.4.5** Reduction or limitation of retainage, if any, shall be as follows: Ten percent retainage shall be held until the project is complete.

*(If it is intended, prior to Substantial Completion of the entire Work, to reduce or limit the retainage resulting from the percentages inserted in Subparagraphs 5.1.4.3.1 and 5.1.4.3.2 above, and this is not explained elsewhere in the Contract Documents, insert here provisions for such reduction or limitation.)*

5.1.4.5 The Contractor shall submit to the Construction Manager an itemized progress payment request by the date required in Section 01045 of the Project Manual. The progress payment request is referred to as the Contractor Invoice Form. After the Schedule of Values is submitted to and approved by the Construction Manager, the Construction Manager will prepare a Contractor Invoice Form master template in accordance with the approved schedule of values and provide it to the Contractor for use to prepare all Progress Payment Request. The Contractor shall submit a signed and notarized original Contractor Invoice Form for each monthly progress payment request. It shall be accompanied by such supporting data and documents the Owner, Construction Manager and Architect may require substantiating the Contractor's right to payment.

1. Contractor Invoice Form as defined as: See Section 1045 (Contractors Application for Payment)
2. Cost Control Manual as defined as: See Section 1045 (Contractors Application for Payment)
3. Progress Payment Request as defined as: See Section 1045 (Contractors Application for Payment)

## §5.2 Final Payment

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

- .1 the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Section 12.2 of AIA Document A232 -2009, and to satisfy other requirements, if any, which extend beyond final payment;
- .2 the Contractor has submitted a final accounting for the Cost of the Work, pursuant to Exhibit A, Determination of the Cost of the Work when payment is on the basis of the Cost of the Work, with or without a Guaranteed Maximum payment; and
- .3 a final Certificate for Payment or Project Certificate for Payment has been issued by the Architect; such final be made by the Owner not more than 30 days after the issuance of the final Certificate for Payment or Project Payment, or as follows:

5.2.2 The following must be submitted to the Construction Manager before ~~approval~~ the acceptance and submission of final payment in addition to requirements of other sections:

- .1 All required closeout documents including warranties, guarantees, operation and maintenance documents, and training;
- .2 As-Builts Drawings;
- .3 Itemized lists of all surplus and extra materials required per specifications at which time the Construction Manager will schedule the delivery of such materials to the owner by the Contractor;
- ~~.4 Evidence as required by the Construction Manager to show that Michigan State Sales Tax and all other applicable taxes have been paid by the Contractor;~~
- .5 Consent of Surety for Final Payment;
- .6 Submit Releases and Final Unconditional Waivers of Lien from all suppliers and subcontractors;
- .7 Submit certification stating that no materials containing asbestos were incorporated into the Work;
- .8 Submit certification that all punch list items have been completed.

## ARTICLE 6 DISPUTE RESOLUTIONS

### §6.1 Initial Decision Maker

The Architect will serve as Initial Decision Maker pursuant to Section 15.2 of AIA Document A232 -2009, unless the parties appoint below another individual, not a party to this Agreement, to serve as Initial Decision Maker. *(If the parties mutually agree, insert the name, address and other contact information of the Initial Decision Maker, if other than the Architect.)*

### §6.2 Binding Dispute Resolution

For any Claim subject to, but not resolved by, mediation pursuant to Section 15.3 of AIA Document A232 -2009, the method of binding dispute resolution shall be as follows:

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

- Arbitration pursuant to Section 15.4 of AIA Document A232 -2009
- Litigation in a court of competent jurisdiction
- Other: *(Specify)*

6.2.1 In an effort to resolve any conflicts that arise during the construction of the Project or following the completion of the project, the Owner and the Contractor agree that all disputes between them arising out of or relating to this Agreement shall be submitted to non-binding mediation, unless the parties mutually agree otherwise. All parties shall endeavor to settle disputes by mediation in accordance with the Construction Industry Mediation Rules of the American Arbitration Association currently in effect. Demand for mediation shall be filed in writing with the other party of this Agreement and with the American Arbitration Association. A demand for mediation shall be made within a reasonable time after the claim, dispute, or other matter in writing to the other party. In the event non-binding mediation fails to resolve any or all of the disputes or claims, the parties may pursue relief through any other legal and/or equitable means.

6.2.2 The owner reserves the right in its discretion to require consolidation or joinder of any mediation relating to this Agreement with another mediation involving an independent contractor or consultant engaged by the Owner in connection with the Project. Agreement in the event the Owner believes such consolidation or joinder is necessary in order to resolve a dispute or avoid duplication of time, expense, or effort.

6.2.3 In the event the Owner is involved in a dispute which is not subject to mediation involving a person or entity not a party to this Agreement, the mediation provision of this Article shall be deemed to be void and nonexistent in the event the Owner, in its discretion, determines the Contractor should become a part to that dispute by joinder or otherwise.

6.2.4 The Owner reserves the right to require any mediation to be held near the Owner's principal place of business.

## ARTICLE 7 TERMINATIONS OR SUSPENSION

### §7.1 Where the Contract Sum is a Stipulated Sum

§7.1.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A232 -2009.

§7.1.2 The Work may be suspended by the Owner as provided in Article 14 of AIA Document A232 -2009.

## ARTICLE 8 MISCELLANEOUS PROVISIONS

§8.1 Where reference is made in this Agreement to a provision of AIA Document A232 -2009 or another Contract Document, the reference refers to that provision as amended or supplemented therein, or as amended or supplemented by other provisions of the Contract Documents.

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

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

§8.3 The Owner's representative:

*(Name, address and other information)*

«Owner Name»

«Owner Address»

«Owner CSZ»

§8.4 The Contractor's representative:

*(Name, address and other information)*

«Contractor»

«Address»

«CSZ»

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

§8.6 Other provisions:

8.6.1 Project Team is comprised of the Owner, Construction Manager, Owner's Representative and Architect.

8.6.2 The Bid Division Description(s) outline the work items that the Contractor is responsible to provide for the Project regardless of any customary practices or agreements of that trade.

8.6.3 If a Project Team member has reasonable objection to the actions of or the manner by which work is performed by a person directly employed by the Contractor or by any subcontractor of the Contractor, the Contractor shall propose another to whom the Project Team has no reasonable objection. Any cost associated with the removal and replacement of such a person shall be at the expense of the Contractor.

8.6.4 All Change Orders and Change Directives will be initiated by a Quotation Request. (Reference Sections...01051, and 01053 of the Project Manual). The Quotation Request will be the instrument by which the Contractor will submit a detailed and itemized cost proposal for a proposed change for review by the Construction Manager, Owner's Representative and Architect, and the approval by the Owner, before the contract change is issued.

8.6.5 A Quotation Request shall not alter the Contractor's obligation to comply with the process of filing claims in accordance with other provisions of this agreement.

8.6.6 All Contractors must conform to the provisions of the Michigan Right-To-Know Law, 1986 PA 80.

8.6.7 All Contractors must have available on site a copy of all Safety Data Sheets and in addition provide a copy to the Construction Manager. The Construction Manager will return the copy of the Contractor's Safety Data Sheets at the completion of the project.

8.6.8 The Contractor shall include similar dispute resolution provisions in all agreements with subcontractors, sub-consultants, suppliers, or fabricators so retained, thereby providing for a consistent method of dispute resolution among the parties to those agreements.

8.6.9 In the event of any inconsistency between this agreement and the General Conditions of the Contract for Construction (the "General Conditions"), the terms of this agreement shall govern.

8.6.10 Claims by the Owner arising under this Agreement shall be subject to the limitations provisions defined in Michigan law, except that in no event shall a claim by the Owner be deemed untimely if filed within six (6) years of the final project completion. This provision is acknowledged to apply notwithstanding any other and shorter time frames contractually applicable to claims of the Contractor.

8.6.11 The provisions of the General Conditions related to any waiver of subrogation are hereby deleted from the document and shall be deemed to have no effect. Further, any provision interpreted as the Owner waiving consequential or other indirect damages shall be ineffective and void.

8.6.12 The modifications made to AIA Document A232 – 2009 Edition by the Owner are hereby incorporated into this Agreement.

8.6.13 All specified insurance certificates and/or insurance policies must be received by the Construction Manager prior to the Contractor commencing work. The Contractor agrees to furnish a performance bond, and labor and materials payment bond for the full amount of this contract, including change orders.

## **ARTICLE 9 ENUMERATIONS OF CONTRACT DOCUMENTS**

**§9.1** The Contract Documents, except for Modifications issued after execution of this Agreement are enumerated in the sections below.

**§9.1.1** This Agreement is this executed AIA Document A132 -2009, Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition.

**§9.1.2** The General Conditions are, AIA Document A232 -2009, General Conditions of the Contract for Construction, Construction Manager as Adviser Edition.

**§9.1.3** The Supplementary and other Conditions of the ~~Contract~~: Contract are those contained in the Project Manual dated <Manual Dated>: See Attachment "B"

Document	Title	Date	Pages
----------	-------	------	-------

**§9.1.4** ~~The Specifications:~~ Specifications are those contained in the Project Manual dated <Manual Dated> as in Subparagraph 9.1.3 and are as follows: See Attachment "B"

*(Either list the Specifications here or refer to an exhibit attached to this Agreement.)*

Section	Title	Date	Pages
---------	-------	------	-------

**§9.1.5** The Drawings: Drawings are as follows, and are dated «Drawings Dates» unless a different date is shown below: See Attachment “C”  
*(Either list the Specifications here or refer to an exhibit attached to this Agreement.)*

Number	Title	Date
--------	-------	------

**§9.1.6** The Addenda, if any:

Number	Title	Date	Pages
<u>«Addendum 1»</u>		<u>«Adm Date»</u>	
<u>«Addendum 2»</u>		<u>«Adm 2 Date»</u>	
<u>«Addendum 3»</u>		<u>«Adm 3 Date»</u>	

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

**§9.1.7** Additional documents, if any, forming part of the Contract Documents are:

*(List here any additional documents which are intended to form part of the Contract Documents. AIA Document A232 -2009 provides that bidding requirements such as advertisement or invitation to bid, Instructions to Bidders, sample forms and the Contractor’s bid are not part of the Contract Documents unless enumerated in this Agreement. They should be listed here only if intended to be part of the Contract Documents.)*

Pre Bid Meeting & Agenda Post Bid Interview, and Pre Construction Meeting & Agenda.

**ARTICLE 10 INSURANCE AND BONDS**

The Contractor shall purchase and maintain insurance and provide bonds as set forth in Article 11 of AIA Document A232 – 2009.

(State bonding requirements, if any and limits of liability for insurance required in Article 11 of AIA Document A232 -2009).

Type of Insurance or Bond	Limit of Liability or Bond Amount (\$0.00)
	<b>Per Specifications</b>

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

OWNER  
«Owner Name»

CONTRACTOR  
«Contractor»

\_\_\_\_\_  
 (Signature)

\_\_\_\_\_  
 (Signature)

«Owner and Title»  
 (Printed name and title)

\_\_\_\_\_  
 (Printed name and title)

\_\_\_\_\_  
 (Date)

\_\_\_\_\_  
 (Date)

**PART 1 – GENERAL**

**1.01 BID BONDS**

- A. Bid Security must be in the form of a Bid Bond or a certified check made payable to the Owner.
- B. When a Bid Bond is submitted, the Owner shall be listed as obligee.
- C. When a Bid Bond is submitted, the attorney-in-fact that executes the bond on behalf of the Surety shall attach to the Bond a certified, current copy of their Power of Attorney.
- D. **THE BID BOND AND ALL OTHER BONDS MUST BE ISSUED BY A SURETY COMPANY LICENSED AS SUCH TO DO BUSINESS IN THE STATE OF MICHIGAN.**

**1.02 LABOR & MATERIAL PAYMENT BONDS AND PERFORMANCE BONDS**

- A. The Owner reserves the right to require any successful Bidder to furnish both a Labor and Material Payment Bond, and a Performance Bond, each in the amount of one hundred percent (100%) of their contract amount.
- B. **THE LABOR & MATERIAL PAYMENT BOND AND THE PERFORMANCE BOND MUST BE ISSUED BY A SURETY COMPANY LICENSED AS SUCH TO DO BUSINESS IN THE STATE OF MICHIGAN.**
- C. When required, Labor and Material Payment Bonds and Performance Bonds must be separate. The combined form will not be accepted. Labor & Material Payment Bonds and Performance Bonds must be submitted on AIA Document A312, 2010 edition, without modifications.
- D. When submitted, Labor and Material Payment Bonds and Performance Bonds shall include:
  - 1. Full name and address of Contractor Surety and Owner.
  - 2. The proper Contract Date.
  - 3. The exact amount of the Contract.
  - 4. A description of the contract work / project.
  - 5. The Owner's name and address.
  - 6. An incorporation by reference of the contract terms.
  - 7. Language obligating the Surety, jointly and severally, with the Contract to the Owner
  - 8. The condition for discharge to the Surety.
  - 9. Signature.
  - 10. Corporate Seal, if applicable.
  - 11. Notarization.
  - 12. Power of Attorney.

**1.03 SUPPLY BONDS**

- A. The Owner reserves the right to require any direct supplier to furnish a Supply Bond in the amount of one hundred percent (100%) of their contract amount.
- B. Supply Bonds shall include all information required above (reference 1.02C above) for Labor and Material Payment Bonds and Performance Bonds.
- C. **ALL SUPPLY BONDS SHALL BE LEGAL AND ENFORCEABLE IN THE STATE OF MICHIGAN.**

**1.04 BOND COSTS IN BIDS**

- A. Do not include costs for Labor and Material Payment Bond(s), Performance Bond(s), or Supply Bond(s) in Base bid. State the cost of such Bond(s) separately, in the space(s) provided on the Proposal Form (Section 00300).

**1.05 SUBMISSION OF BONDS**

- A. Bonds shall be submitted to the Construction Manager for delivery to the Owner within fifteen (15) days following the date of issue of the Contract.
- B. Bonds must be submitted prior to contract execution and accepted by the Owner before work may begin on-site.
- C. If the work is commenced prior to contract execution in response to a Notice to Proceed (reference Section 00500), the Contractor shall, prior to commencement of the work, submit evidence satisfactory to the Owner that required bonds will be furnished, and shall deliver the Bonds by the date the Bidder executes the Owner/Contractor Agreement (reference Section 00510).

**END OF SECTION 00600**

**PART 1 – GENERAL**

**1.01 INSURANCE CERTIFICATES**

- A. Each Contractor shall provide, prior to the beginning of Work, a certificate of insurance for delivery to the Owner indicating that all required insurance coverage is in force.
- B. Use standard Insurance Certificate Form. The Accord Form 25 (2016/03) are preferable forms. These forms should be obtained from your Insurance agent.
- C. Issue all certificates to: **Bay City Public Schools**  
**601 Blend Street**  
**Bay City MI 48706**
- D. Certificates must show as ‘additional insured’ the Owner, **Bay City Public Schools**, the Architect, **WTA Architects**, and the Construction Manager, **WOLGAST CORPORATION**.
- E. A “Letter of Compliance” must be completed and submitted along with the certificate of insurance. The “Letter of Compliance” form is Page 3 of this section.
- F. **Insurance certificates must be completed as follows: (please refer to corresponding numerals on the sample certificate (following instructions) and also reference the “Section 00700 - General Conditions of the Contract for Construction.”**
1. This blank is to be dated the date the certificate of insurance is issued.
  2. This blank is to provide the complete name and address of the insurance agency issuing the certificate.
  3. This blank is to provide the full name and address of the “prime contractor.”
  4. These blanks are to provide the name (or names) of the insurance company (ies) providing coverage for the specific coverage issued on the certificate.
  5. General Liability
    - a. General Liability – All blanks must be checked in this section and policies must be on an “occurrence” basis.
    - b. Policy Number – A policy number must be listed here.
    - c. Policy “effective” and “expiration” dates must be listed in these two blanks.
    - d. This section must be filled in with dollar amounts (listed in thousands). Please refer to the example on the following page.
  6. Automobile liability
    - a. These blanks must be filled in with either:  
Option 1: Any Auto, Hired, and Non-Owned automobiles OR  
Option 2: All Owned Autos (Priv. Pass.), All Owned Autos (Other than Priv. Pass.), Hired Autos, and Non-Owned Autos.
    - b. Policy Number – A policy number must be listed here.
    - c. Policy Effective and Expiration dates must be listed in these two blanks.
    - d. This Section must be filled in with dollar amounts (in thousands).
  7. Excess Liability (Provide \$2 million Excess Liability Umbrella policy):
    - a. This blank must be checked with the “Umbrella Form.”
    - b. Policy Number – A policy number must be listed here.
    - c. Policy Effective and Expiration dates must be listed in these blanks.
    - d. If this section is required (see Item 7 above), both of these blanks must be filled in with a minimum of \$2,000,000 and \$2,000,000.



8. Worker's Compensation
  - a. Nothing needs to be checked here.
  - b. Policy Number – A policy number must be listed here.
  - c. Policy Effective and Expiration dates must be listed in these blanks.
  - d. These blanks must be filled in with minimum limits as follows:
    - \$500,000 (each accident)
    - \$500,000 (disease policy limits)
    - \$500,000 (disease each employee)
9. This section need not be completed unless some unique coverage is required for a certain type of job.
10. This section should contain the listing of the additional insured as in 1.01D. The names of the Owner, Architect, and Construction Manager must be listed here.
11. The Owner should be listed here, as this is the actual Certificate Holder. List the Owner as follows:

**Bay City Public Schools**

12. This blank must show the number thirty (30), indicating that the Owner and all additional insured parties will receive at least thirty (30) days' notice of cancellation of any of the policies listed on the certificate.
13. The certificate must be signed by a licensed insurance agent or representative of the insurance company in order to be valid.

***NOTE: Sample Certificate of Liability and Letter of Compliance follows.***

**Letter of Compliance**

Owner: \_\_\_\_\_

Contractor: \_\_\_\_\_

Project: \_\_\_\_\_

This letter is to acknowledge that I/We am/are the Insurance Agent(s) for the above-named Contractor and furthermore, that we have reviewed the insurance coverage required under this Contract with the Owner:

**Bay City Public Schools**

We hereby certify that said Contractor is in compliance with all insurance coverage required under this Contract with the Owner referenced above.

We hereby certify that said Contractor is in compliance with all insurance requirements, whether or not so evidenced on the attached certificate of insurance.

**Signed:** \_\_\_\_\_

Agency: \_\_\_\_\_

Address: \_\_\_\_\_

Agent: \_\_\_\_\_

Witness: \_\_\_\_\_

Date: \_\_\_\_\_

Notary: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_

**For:** \_\_\_\_\_

Contractor: \_\_\_\_\_

Address: \_\_\_\_\_

Bid Division: \_\_\_\_\_



POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

**ADDITIONAL INSURED - OWNERS, LESSEES OR  
CONTRACTORS - SCHEDULED PERSON OR ORGANIZATION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

**SCHEDULE**

Name Of Additional Insured Person(s) Or Organization(s)	Location(s) Of Covered Operations
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

**A. Section II - Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

**B.** With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

**C.** With respect to the insurance afforded to these additional insureds, the following is added to **Section III - Limits Of Insurance**:

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or
2. Available under the applicable Limits of Insurance shown in the Declarations;

whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

**ADDITIONAL INSURED - OWNERS, LESSEES OR  
CONTRACTORS - AUTOMATIC STATUS WHEN  
REQUIRED IN CONSTRUCTION AGREEMENT WITH YOU**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

**A. Section II - Who Is An Insured** is amended to include as an additional insured any person or organization for whom you are performing operations when you and such person or organization have agreed in writing in a contract or agreement that such person or organization be added as an additional insured on your policy. Such person or organization is an additional insured only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured.

However, the insurance afforded to such additional insured:

1. Only applies to the extent permitted by law; and
2. Will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

A person's or organization's status as an additional insured under this endorsement ends when your operations for that additional insured are completed.

**B.** With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to:

1. "Bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of, or the failure to render, any professional architectural, engineering or surveying services, including:

- a. The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or
- b. Supervisory, inspection, architectural or engineering activities.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage", or the offense which caused the "personal and advertising injury", involved the rendering of or the failure to render any professional architectural, engineering or surveying services.

2. "Bodily injury" or "property damage" occurring after:

- a. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
- b. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as part of the same project.

**C.** With respect to the insurance afforded to these additional insureds, the following is added to **Section III - Limits Of Insurance**:

The most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement you have entered into with the additional insured; or
2. Available under the applicable Limits of Insurance shown in the Declarations;

whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

**ADDITIONAL INSURED - OWNERS, LESSEES OR  
CONTRACTORS - COMPLETED OPERATIONS**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART  
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

**SCHEDULE**

Name Of Additional Insured Person(s) Or Organization(s)	Location(s) And Description Of Covered Operations
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

**A. Section II - Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the

contract or agreement to provide for such additional insured.

**B. With respect to the insurance afforded to these additional insureds, the following is added to Section III - Limits Of Insurance:**

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or
2. Available under the applicable Limits of Insurance shown in the Declarations;

whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

**PART 1 – GENERAL**

**1.01 DESCRIPTION**

- A. Within fifteen (15) days following the date of the issue of the Notice to Proceed (Section 00500), each Contractor shall submit to the Construction Manager for delivery to the Owner, a Schedule of Values showing accurate costs for the elements of their Work.
- B. The Schedule of Values shall be typed or printed on the Contractor's letterhead, identify the project and work division, and must be dated and signed.
- C. The Schedule of Values shall divide the Work into a sufficient number of individual cost elements to serve as an accurate basis for Contractor's Application for Payment.
- D. Each work element shall be listed identifying labor and material as separate line items. Each work element shall include its prorated share of profit, overhead, and retainage.

**1.02 SPECIAL ITEMS**

- A. As a part of the schedule of values the Contractor shall designate specific line items and associated values identified as:
  - 1. Performance Bond and Labor & Material Payment Bond (when required by Owner).  
Value: Actual Cost of Bonds
  - 2. Daily housekeeping and clean-up inclusive of any special cleaning and preparation required by the specification for delivering the building for the Owners occupancy.  
Value: Two percent (2%) of the total Contract Amount
  - 3. Retainage / Punch List  
Value: Ten percent (10%) of the total Contract Amount
- B. A request for payment of any special item amount contained in the Contractor's approved Schedule of Values or a portion thereof may be submitted for payment once the work for that item has been completed to the satisfaction of the Owner, Architect and Construction Manager
- C. Upon the completion of the Contractor's work exclusive of any punch list work, a Contractor may submit a separate Application for Payment requesting the Retention / Punch List line item be reduced to (5%). **This** request must be submitted to the Construction Manager along with a Partial Consent of Surety. Once received, the Construction Manager will forward it to the Owner for approval and notify the contractor when fully executed. The Owner shall reserve the right to accept or reject all requests for Retention / Punch List reduction.
- D. The Schedule of Values shall be submitted and approved prior to Contract execution and receipt of any payment.
- E. **Absolutely NO CHANGES may be made to an approved Schedule of Values.**
- F. Increases or decreases in the Contract Amount shall be through change orders.
- G. Each Change Order shall be listed as a new line item on the Contractor Invoicing Form.

**END OF SECTION 00670**



**PART 1 – GENERAL**

**1.01 DESCRIPTION**

- A. Within fifteen (15) days following the date of the issue of the Contract, each Contractor shall submit to the Construction Manager for delivery to the Owner, a list of all subcontractors that they intend to utilize in their performance of the Work, and all suppliers who will be providing materials and/or equipment to be incorporated into the Work.
- B. All SUBCONTRACTORS' names, addresses, telephone numbers, and types of Work shall be included on the list.
- C. All SUPPLIERS' names, addresses, telephone number, and items provided shall be included on the list.
- D. All items of material and equipment included in the Work shall be listed. Each item shall be listed with its manufacturer, supplier, and installing subcontractor, if applicable.
- E. Subcontractor / Supplier / Material / Equipment listings shall be submitted prior to contract execution.
- F. Prior to awarding a contract, the Construction Manager will notify the contractor if the Owner has a reasonable and substantial objection to any person, organization, material and/or equipment listed by the Contractor. If the Owner has a reasonable and substantial objection, the Contractor shall amend their Proposal by providing an acceptable substitute. The Owner may, at their discretion, accept such a substitute or they may disqualify the Proposal.
- G. **Suppliers, Subcontractors, Material, and Equipment proposed by the Contractor and accepted by the Owner shall be used in the Work for which they are proposed and accepted and shall not be changed except with prior written approval by the Construction Manager and Owner.**

**END OF SECTION 00680**

**PART 1 – GENERAL**

**1.01 DESCRIPTION**

- A. Within fifteen (15) days following the date of issue of a Contract, each Contractor shall submit to the Construction Manager, for delivery to the Owner, a list of all supervisory employees whom the Contractor proposes to employ to accomplish the Work.
- B. This list shall include supervisory employees' names, titles, and duties.
- C. Employee listings shall be submitted prior to contract execution.

**1.02 OWNER'S APPROVAL**

- A. Contractors are required to establish, to the satisfaction of the Owner, the reliability and responsibility of proposed employees.
- B. Prior to the award of a contract, the Construction Manager will notify the Contractor if the Owner has a reasonable and substantial objection to any person listed by the Contractor. If the Owner has reasonable and substantial objection, the Contractor may amend their Proposal by providing an acceptable substitute. The Owner may, at their discretion, accept such a substitute or they may disqualify the Proposal.
- C. Employees proposed by the Contractor and accepted by the Owner shall be employed on the Work for which they are proposed and accepted and shall not be changed except with written approval of the Owner.

**END OF SECTION 00690**

**PROJECT  
GENERAL CONDITIONS  
OF THE CONTRACT FOR  
CONSTRUCTION ON  
FOLLOWING PAGE(S)**

END OF SECTION 00700



# AIA<sup>®</sup> Document A232<sup>™</sup> – 2009

## **General Conditions of the Contract for Construction, Construction Manager as Adviser Edition**

### **for the following PROJECT:**

*(Name, and location or address)*

Bay City Public Schools, 2018 Sinking Fund Construction Program, including projects approved and authorized by the owner in writing, all performed in accordance with the approved project scopes, the approved plans and specifications, all applicable laws, the Owner's fixed budget, and as otherwise approved by the Owner

### **THE CONSTRUCTION MANAGER:**

*(Name, legal status and address)*

Wolgast Corporation  
4835 Towne Centre Road, Suite 203  
Saginaw, Michigan 48604  
Telephone: (989) 790-9120  
Facsimile: (989) 790-9063

### **THE OWNER:**

*(Name, legal status and address)*

Bay City Public Schools  
910 N. Walnut Street  
Bay City, Michigan 48706  
Telephone: (989) 686-9700  
Facsimile: (989) 686-1047

### **THE ARCHITECT:**

*(Name, legal status and address)*

WTA Architects  
100 S. Jefferson Avenue, Suite 601  
Saginaw, Michigan 48607  
Telephone: (989) 752-8107  
Facsimile: (989) 752-3125

### **ADDITIONS AND DELETIONS:**

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

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

This document is intended to be used in conjunction with AIA Documents A132<sup>™</sup>-2009, Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition; B132<sup>™</sup>-2009, Standard Form of Agreement Between Owner and Architect, Construction Manager as Adviser Edition; and C132<sup>™</sup>-2009, Standard Form of Agreement Between Owner and Construction Manager as Adviser.

Init.

TABLE OF ARTICLES

- 1 GENERAL PROVISIONS
- 2 OWNER
- 3 CONTRACTOR
- 4 ARCHITECT AND CONSTRUCTION MANAGER
- 5 SUBCONTRACTORS
- 6 CONSTRUCTION BY OWNER OR BY OTHER CONTRACTORS
- 7 CHANGES IN THE WORK
- 8 TIME
- 9 PAYMENTS AND COMPLETION
- 10 PROTECTION OF PERSONS AND PROPERTY
- 11 INSURANCE AND BONDS
- 12 UNCOVERING AND CORRECTION OF WORK
- 13 MISCELLANEOUS PROVISIONS
- 14 TERMINATION OR SUSPENSION OF THE CONTRACT
- 15 CLAIMS AND DISPUTES

Init.

## INDEX

(Topics and numbers in bold are section headings.)

### Acceptance of Nonconforming Work

9.6.6, 9.9.3, **12.3**

Acceptance of Work

9.6.6, 9.8.2, 9.9.3, 9.10.1, 9.10.3, 12.3

### Access to Work

**3.16**, 6.2.1, 12.1

Accident Prevention

10

Acts and Omissions

3.2.1, 3.2.2, 3.3.2, 3.12.8, 3.18, 8.3.1, 9.5.1, 10.1,

10.2.5, 13.4.2, 13.7

Addenda

1.1.1, 3.11, 4.2.14

Additional Costs, Claims for

3.2.4, 3.7.4, 3.7.5, 6.1.1, 7.3, 9.10.3, 9.10.4, 10.3,

10.4, 15.1.4

Additional Inspections and Testing

4.2.8, 12.2.1, 13.5

Additional Insured

11.1.4

Additional Time, Claims for

3.7.4, 3.7.5, 6.1.1, 7.3, 8.3, 10.3

### Administration of the Contract

3.10, **4.2**

Advertisement or Invitation to Bid

1.1.1

Aesthetic Effect

4.2.19

### Allowances

**3.8**, 7.3.8

All-risk Insurance

11.3.1, 11.3.1.1

### Applications for Payment

4.2.7, 4.2.15, 7.3.9, 9.2, **9.3**, 9.4, 9.5.1, 9.7, 9.8.3,

9.10.1, 9.10.3, 9.10.5, 11.1.3, 14.2.4

Approvals

2.1.1, 2.2.2, 2.4, 3.1.4, 3.10.1, 3.10.2, 3.12.4 through

3.12.10, 3.13.2, 3.15.2, 4.2.9, 9.3.2, 13.4.2, 13.5

### Arbitration

8.3.1, 11.3.10, 13.1, 15.3.2, **15.4**

## ARCHITECT

**4**

Architect, Certificates for Payment

9.4

Architect, Definition of

4.1.1

Architect, Extent of Authority

5.2, 7.1.2, 7.3.7, 7.4, 9.3.1, 9.4, 9.5, 9.8.3, 9.8.4,

9.10.1, 9.10.3, 12.1, 12.2.1, 13.5.1, 13.5.2, 15.1.3,

15.2.1

Architect, Limitations of Authority and Responsibility

2.1.1, 3.12.8, 4.2.1, 4.2.2, 4.2.8, 4.2.13, 5.2.1, 9.6.4,

15.2

Architect's Additional Services and Expenses

2.4, 11.3.1.1, 12.2.1, 12.2.4, 13.5.2

Architect's Administration of the Contract

4.2, 9.4, 9.5, 15.2

Architect's Approvals

3.12.8

Architect's Authority to Reject Work

4.2.8, 12.1.2, 12.2.1

Architect's Copyright

1.5

Architect's Decisions

4.2.8, 7.3.9, 7.4, 8.1.3, 8.3.1, 9.2, 9.4, 9.5, 9.8.3, 9.9.2,

13.5.2, 14.2.2, 14.2.4, 15.2

Architect's Inspections

3.7.4, 4.2, 9.8.3, 9.9.2, 9.10.1, 13.5

Architect's Instructions

3.2.4, 7.4, 9.4

Architect's Interpretations

4.2.8, 4.2.17, 4.2.18

Architect's On-Site Observations

4.2.2, 9.4, 9.5.1, 9.10.1, 12.1.1, 12.1.2, 13.5

Architect's Project Representative

4.2.16

Architect's Relationship with Contractor

1.1.2, 1.5, 3.2.2, 3.2.3, 3.2.4, 3.3.1, 3.4.2, 3.5, 3.7.4,

3.9.2, 3.9.3, 3.10, 3.11, 3.12.8, 3.16, 3.18, 4.2, 5.2,

6.2.2, 8.2, 11.3.7, 12.1, 13.5

Architect's Relationship with Construction Manager

1.1.2, 9.3 through 9.10, 10.3, 13.5.1, 10.3, 11.3.7,

13.4.2, 13.5.4

Architect's Relationship with Subcontractors

1.1.2, 4.2.8, 5.3, 9.6.3, 9.6.4

Architect's Representations

9.4, 9.5, 9.10.1

Architect's Site Visits

4.2.2, 9.4, 9.5.1, 9.8.3, 9.9.2, 9.10.1, 13.5

Asbestos

10.3.1

Attorneys' Fees

3.18.1, 9.10.2, 10.3.3

Award of Other Contracts

6.1.1, 6.1.2

### Award of Subcontracts and Other Contracts for

Portions of the Work

**5.2**

### Basic Definitions

**1.1**

Bidding Requirements

1.1.1, 5.2.1, 11.4.1

Bidding Dispute Resolution

9.7, 11.3.9, 11.3.10, 13.1, 15.2.5, 15.2.6.1, 15.3.1,

15.3.2, 15.4.1

**Boiler and Machinery Insurance**

**11.3.2**

**BONDS, INSURANCE AND**

**11**

Bonds, Lien

7.3.7.4, 9.10.3

Bonds, Performance and Payment

7.3.7.4, 9.6.7, 9.10.3, 11.3.9, 11.4

Building Permit

2.2.2, 3.7.1

**Capitalization**

**1.3**

Certificate of Substantial Completion

9.8.3, 9.8.4, 9.8.5

**Certificates for Payment**

4.2.2, 9.3.3, 9.4, 9.5, 9.6.1, 9.6.6, 9.7, 9.10.1, 9.10.3,

15.1.3

Certificates of Inspection, Testing or Approval

13.5.4

Certificates of Insurance

9.3.2, 9.10.2, 11.1.3

**Change Orders**

1.1.1, 2.4, 3.4.2, 3.7.4, 3.8.2, 3.11, 3.12.8, 4.2.12,

4.2.13, 4.2.14, 5.2.3, 7.1.1, 7.1.2, 7.2, 7.3.2, 7.3.4,

7.3.6, 7.3.9, 7.3.10, 8.3.1, 9.3.1.1, 9.10.3, 10.3.2,

11.3.1.2, 11.3.4, 11.3.9, 12.1.2, 15.1.3

Change Orders, Definition of

7.2

Changes

7.1

**CHANGES IN THE WORK**

2.2.1, 3.4.2, 3.11, 3.12.8, 4.2.13, 4.2.14, 7, 8.3.1,

9.3.1.1

Claims, Definition of

15.1.1

**CLAIMS AND DISPUTES**

1.1.8, 3.2.4, 3.7.5, 6.1.1, 7.3.9, 8.3.2, 9.3.3, 9.10.3,

9.10.4, 10.3.3, 15, 15.4

**Claims for Additional Cost**

3.2.4, 3.7.5, 6.1.1, 7.3.9, 9.10.3, 9.10.4, 10.3.2, 10.4,

15.1.4

**Claims for Additional Time**

3.2.4, 3.7.5, 7, 8.3.2, 10.4, 15.1.5

Concealed or Unknown Conditions, Claims for

3.7

Claims for Damages

3.2.4, 3.18, 6.1.1, 6.2.5, 8.3.2, 9.3.3, 9.5.1.2, 9.10.2,

9.10.5, 10.3.3, 11.1.1, 11.3.5, 11.3.7, 15.1.6

**Cleaning Up**

3.15, 6.3

Commencement of Statutory Limitation Period

13.7

Commencement of the Work, Definition of

8.1.2

Communications, Owner to Architect

2.2.6

Communications, Owner to Construction Manager

2.2.6

Communications, Owner to Contractor

2.2.6

**Communications Facilitating Contract Administration**

3.9.1, 4.2.6

**COMPLETION, PAYMENTS AND**

**9**

**Completion, Substantial**

4.2.15, 8.1.1, 8.1.3, 8.2.3, 9.4.3.3, 9.8, 9.9.1, 9.10.3,

12.2.1, 12.2.2, 13.7

**Concealed or Unknown Conditions**

3.7.4, 4.2.8, 8.3.1, 10.3

Conditions of the Contract

1.1.1

**Consolidation or Joinder**

15.4.4

**CONSTRUCTION BY OWNER OR BY OTHER CONTRACTORS**

1.1.4, 6

Construction Change Directive, Definition of

7.3.1

**Construction Change Directives**

1.1.1, 3.4.2, 3.12.8, 4.2.12, 4.2.13, 7.1.1, 7.1.2, 7.1.3,

7.3, 9.3.1.1

Construction Manager, Building Permits

2.2.2

Construction Manager, Communications through

4.2.6

Construction Manager, Construction Schedule

3.10.1, 3.10.3

**CONSTRUCTION MANAGER**

4

Construction Manager, Definition of

4.1.2

Construction Manager, Documents and Samples at the

Site

3.11

Construction Manager, Extent of Authority

3.12.7, 3.12.8, 4.1.3, 4.2.1, 4.2.4, 4.2.5, 4.2.9, 7.1.2,

7.2, 7.3.1, 8.3, 9.3.1, 9.4.1, 9.4.2, 9.4.3, 9.8.2, 9.8.3,

9.8.4, 9.9.1, 12.1, 12.2.1, 14.2.2, 14.2.4

Construction Manager, Limitations of Authority and

Responsibility

4.2.5, 4.2.8, 13.4.2

Construction Manager, Submittals

4.2.9

Construction Manager's Additional Services and

Expenses

12.2.1

Construction Manager's Administration of the

Contract

4.2, 9.4, 9.5

Construction Manager's Approval

2.4, 3.10.1, 3.10.2

Init.

Construction Manager's Authority to Reject Work  
4.2.8, 12.2.1

Construction Manager's Decisions  
7.3.7, 7.3.9, 9.4.1, 9.5.1

Construction Manager's Inspections  
4.2.8, 9.8.3, 9.9.2

Construction Manager's On-Site Observations  
9.5.1

Construction Manager's Relationship with Architect  
1.1.2, 4.2.1, 4.2.7, 4.2.8, 4.2.9, 4.2.13, 4.2.15, 4.2.16,  
4.2.20, 9.2.1, 9.4.2, 9.5, 9.6.1, 9.6.3, 9.8.2, 9.8.3,  
9.8.4, 9.9.1, 9.10.1, 9.10.2, 9.10.3, 11.1.3, 12.2.4,  
13.5.1, 13.5.2, 13.5.4, 14.2.2, 14.2.4

Construction Manager's Relationship with Contractor  
3.2.2, 3.2.3, 3.3.1, 3.5, 3.10.1, 3.10.2, 3.10.3, 3.11,  
3.12.5, 3.12.6, 3.12.7, 3.12.8, 3.12.9, 3.12.10, 3.13.2,  
3.14.2, 3.15.2, 3.16, 3.17, 3.18.1, 4.2.4, 4.2.5, 4.2.6,  
4.2.9, 4.2.14, 4.2.17, 4.2.20, 5.2, 6.2.1, 6.2.2, 7.1.2,  
7.2, 7.3.5, 7.3.7, 7.3.10, 8.3.1, 9.2, 9.3.1, 9.4.1, 9.4.2,  
9.7, 9.8.2, 9.8.3, 9.8.4, 9.9.1, 9.10.1, 9.10.2, 9.10.3,  
10.1, 10.3, 11.3.7, 12.1, 13.5.1, 13.5.2, 13.5.3, 13.5.4

Construction Manager's Relationship with Owner  
2.2.2, 4.2.1, 10.3.2

Construction Manager's Relationship with Other  
Contractors and Owner's Own Forces  
4.2.4

Construction Manager's Relationship with  
Subcontractors  
4.2.8, 5.3, 9.6.3, 9.6.4

Construction Manager's Site Visits  
9.5.1

Construction Schedules, Contractor's  
3.10, 3.12.1, 3.12.2, 6.1.2, 15.1.5.2

**Contingent Assignment of Subcontracts**  
5.4, 14.2.2.2

**Continuing Contract Performance**  
15.1.3

**Contract**, Definition of  
1.1.2

**CONTRACT, TERMINATION OR  
SUSPENSION OF THE**  
5.4.1.1, 11.3.9, 14

Contract Administration  
3.1.3, 4.2, 9.4, 9.5

Contract Award and Execution, Conditions Relating  
to  
3.7.1, 3.10, 5.2, 6.1, 11.1.3, 11.3.6, 11.4.1

Contract Documents, Copies Furnished and Use of  
1.5.2, 2.2.5, 5.3

**Contract Documents**, Definition of  
1.1.1

Contract Performance During Arbitration  
15.1.3

**Contract Sum**  
3.7.4, 3.7.5, 3.8, 3.10.2, 5.2.3, 7.2, 7.3, 7.4, 9.1, 9.2,  
9.5.1.4, 9.6.7, 9.7, 10.3.2, 11.3.1.1, 12.3, 14.2.4,  
14.3.2, 15.1.4, 15.2.5

Contract Time  
3.7.4, 3.7.5, 4, 3.10.2, 5.2.3, 7.2.3, 7.3.1, 7.3.5, 7.3.10,  
7.4, 8.1.1, 8.2.1, 8.2.3, 8.3.1, 9.5.1, 9.7, 10.3.2, 12.1.1,  
14.3.2, 15.1.5.1, 15.2.5

Contract Time, Definition of  
8.1.1

**CONTRACTOR**  
3

Contractor, Definition of  
3.1.1

**Contractor's Construction Schedules**  
3.10, 3.12.1, 3.12.2, 6.1.3, 15.1.5.2

Contractor's Employees  
3.3.2, 3.4.3, 3.8.1, 3.9, 3.18.2, 4.2.3, 4.2.6, 10.2, 10.3,  
11.1.1, 11.3.7, 14.1, 14.2.1.1

**Contractor's Liability Insurance**  
11.1

Contractor's Relationship with Other Contractors and  
Owner's Own Forces  
3.12.5, 3.14.2, 4.2.6, 6, 11.3, 12.1.2, 12.2.4

Contractor's Relationship with Subcontractors  
1.2.2, 3.3.2, 3.18, 5, 9.6.2, 9.6.7, 9.10.2, 11.3.1.2,  
11.3.7, 11.3.8, 14.2.1.2

Contractor's Relationship with the Architect  
1.1.2, 1.5, 3.2.2, 3.2.3, 3.2.4, 3.4.2, 3.5, 3.7.4, 3.10.1,  
3.11, 3.12, 3.16, 3.18, 5.2, 6.2.2, 7, 8.3.1, 9.2, 9.3, 9.4,  
9.5, 9.7, 9.8, 9.9, 10.2.6, 10.3, 11.3.7, 12, 13.5, 15.1.2,  
15.2.1

Contractor's Relationship with the Construction  
Manager  
1.1.2, 3.2.2, 3.2.3, 3.3.1, 3.5, 3.10.1, 3.10.2, 3.10.3,  
3.11, 3.12.5, 3.12.7, 3.12.9, 3.12.10, 3.13.2, 3.14.2,  
3.15.1, 3.16, 3.17, 3.18.1, 4.2.4, 4.2.5, 5.2, 6.2.1,  
6.2.2, 7.1.2, 7.3.5, 7.3.7, 7.3.10, 8.3.1, 9.2, 9.3.1,  
9.4.1, 9.4.2, 9.8.2, 9.9.1, 9.10.1, 9.10.2, 9.10.3, 10.1,  
10.2.6, 10.3, 11.3.7, 12.1, 13.5.1, 13.5.2, 13.5.3,  
13.5.4

Contractor's Representations  
3.2.1, 3.2.2, 3.5, 3.12.6, 6.2.2, 8.2.1, 9.3.3, 9.8.2

Contractor's Responsibility for Those Performing the  
Work  
3.3.2, 3.18, 5.3, 6.1.3, 6.2, 9.5.1, 10.2.8

Contractor's Review of Contract Documents  
3.2

Contractor's Right to Stop the Work  
9.7

Contractor's Right to Terminate the Contract  
14.1

Contractor's Submittals  
3.10.2, 3.11, 3.12, 4.2.9, 9.2, 9.3, 9.8.2, 9.9.1, 9.10.2,  
9.10.3, 11.1.3, 11.4.2

Contractor's Superintendent  
3.9, 10.2.6

Contractor's Supervision and Construction  
Procedures  
1.2.2, 3.3, 3.4, 4.2.5, 4.2.7, 6.1, 6.2.4, 7.1.3, 7.3.5,  
7.3.7, 8.2, 10, 12, 14, 15.1.3

Init.



Contractual Liability Insurance  
 11.1.1.8, 11.2, 11.3.1.5  
 Coordination and Correlation  
 1.2, 3.2, 3.3.1, 3.10, 3.12.6, 6.1.2, 6.2.1  
 Copies Furnished of Drawings and Specifications  
 1.5, 2.2.5, 3.11  
 Copyrights  
 1.5, 3.17  
**Correction of Work**  
 2.3, 2.4, 9.4.1, 9.4.2, 9.8.2, 9.8.3, 9.9.1, 12.1.2, 12.2  
**Correlation and Intent of the Contract Documents**  
**1.2**  
 Costs  
 2.4, 3.2.4, 3.7.3, 3.8.2, 3.15.2, 5.4.2, 6.1.1, 6.2.3,  
 7.3.3.3, 7.3.6, 7.3.7, 7.3.8, 7.3.9, 11.3.1.2, 11.3.1.3,  
 11.3.4, 11.3.9, 12.1, 12.2.1, 13.5, 14  
**Cutting and Patching**  
**3.14, 6.2.5**  
 Damage to Construction of Owner or Other  
 Contractors  
 3.14.2, 6.2.4, 9.5.1.5, 10.2.1.2, 10.2.5, 10.4, 11.1.1,  
 11.3, 12.2.4  
 Damage to the Work  
 3.14.2, 9.9.1, 10.2.1.2, 10.2.5, 10.4, 11.3.1, 12.2.4  
 Damages, Claims for  
 3.2.4, 3.18, 6.1.1, 8.3.2, 10.3.3, 11.1.1, 11.3.5, 11.3.7,  
 14.2.4, 15.1.6  
 Damages for Delay  
 6.1.1, 8.3.3, 9.5.1.6, 9.7, 10.3.2, 15.1.5  
 Date of Commencement of the Work, Definition of  
 8.1.2  
 Date of Substantial Completion, Definition of  
 8.1.3  
 Day, Definition of  
 8.1.4  
 Decisions of the Architect  
 3.7.4, 4.2.7, 4.2.8, 4.2.10, 4.2.11, 4.2.13, 4.2.15,  
 4.2.16, 4.2.17, 4.2.18, 4.2.19, 4.2.20, 7.3.9, 8.1.3,  
 8.3.1, 9.2, 9.4, 9.5, 9.8.3, 9.8.4, 9.9.1, 10.1.2, 13.5.2,  
 14.2.2, 14.2.4, 15.1, 15.2  
 Decisions of the Construction Manager  
 7.3.7, 7.3.8, 7.3.9, 15.1, 15.2  
**Decisions to Withhold Certification**  
 9.4.1, 9.5, 9.7, 14.1.1.3  
 Defective or Nonconforming Work, Acceptance,  
 Rejection and Correction of  
 2.3, 2.4, 3.5, 4.2.8, 6.2.5, 9.5.1, 9.6.6, 9.8.2, 9.9.3,  
 9.10.4, 12.2.1, 12.2.2  
 Definitions  
 1.1, 2.1.1, 3.1.1, 3.12.1, 3.12.2, 3.12.3, 4.1.1, 4.1.2,  
 7.2, 7.3.1, 8.1, 9.1, 9.8.1, 15.1.1  
**Delays and Extensions of Time**  
 3.2, 3.7.4, 5.2.3, 7.2, 7.3.1, 7.4, 8.3, 9.5.1, 9.7, 10.3.2,  
 10.4, 14.3.2, 15.1.5, 15.2.5  
 Disputes  
 7.3.8, 7.3.9, 9.3, 15.1, 15.2

**DISPUTES, CLAIMS AND**  
 3.2.4, 6.1.1, 6.3, 7.3.9, 9.3.3, 15, 15.4  
**Documents and Samples at the Site**  
**3.11**  
**Drawings, Definition of**  
**1.1.5**  
**Drawings and Specifications, Ownership and Use**  
 1.1.1, 1.5, 2.2.5, 3.11, 5.3  
 Duty to Review Contract Documents and Field  
 Conditions  
 3.2  
 Effective Date of Insurance  
 8.2.2, 11.1.2  
**Emergencies**  
**10.4, 14.1.1.2, 15.1.4**  
 Employees, Contractor's  
 3.3.2, 3.4.3, 3.8.1, 3.9, 3.18.1, 3.18.2, 4.2.3, 4.2.6,  
 10.2, 10.3.3, 11.1.1, 11.3.7, 14.1, 14.2.1.1  
 Equipment, Labor, Materials and or  
 1.1.3, 1.1.6, 3.4, 3.5, 3.8.2, 3.8.3, 3.12.2, 3.12.3,  
 3.13.1, 3.15.1, 4.2.8, 4.2.7, 5.2.1, 6.2.1, 7.3.7, 9.3.2,  
 9.3.3, 9.5.1.3, 9.10.2, 10.2.1, 10.2.4, 14.2.2  
 Execution and Progress of the Work  
 1.1.3, 1.2.1, 1.2.2, 2.2.3, 2.2.5, 3.1, 3.3.1, 3.4.1, 3.5,  
 3.7.1, 3.10.1, 3.12, 3.14, 4.2, 6.2.2, 7.1.3, 7.3.5, 8.2,  
 9.5.1, 9.9.1, 10.2, 10.3, 12.2, 14.2, 14.3.1, 15.1.3  
 Extensions of Time  
 3.2.4, 3.7.4, 5.2.3, 7.2.3, 7.4, 8.3, 9.5.1, 9.7, 10.3.2,  
 10.4, 14.3, 15.1.5, 15.2.5  
**Failure of Payment**  
 9.5.1.3, 9.7, 13.6, 14.1.1.3, 14.1.3, 14.2.1.2, 15.1.4  
 Faulty Work (See Defective or Nonconforming Work)  
**Final Completion and Final Payment**  
 4.2.1, 4.2.15, 9.8.2, 9.10, 11.1.2, 11.1.3, 11.3.1,  
 11.3.5, 12.3, 15.2.1  
 Financial Arrangements, Owner's  
 2.2.1  
**GENERAL PROVISIONS**  
**1**  
**Governing Law**  
**13.1**  
 Guarantees (See Warranty and Warranties)  
**Hazardous Materials**  
**10.2.4, 10.3**  
 Identification of Contract Documents  
 1.2.1  
 Identification of Subcontractors and Suppliers  
 5.2.1  
**Indemnification**  
**3.18, 9.10.2, 10.3.3, 10.3.5, 10.3.6, 11.3.1.2, 11.3.7**  
**Information and Services Required of the Owner**  
 2.1.2, 2.2, 4.2.6, 6.1.2, 6.2.5, 9.6.1, 9.6.4, 9.8, 9.9.1,  
 9.10.3, 10.3.2, 10.3.3, 11.2, 11.3.4, 13.5.1, 13.5.2,  
 14.1.1.4, 14.1.3, 15.1.2  
**Initial Decision**  
**15.2**

**Initial Decision Maker, Definition of**

**1.1.8**

**Initial Decision Maker, Extent of Authority**

14.2.2, 14.2.4, 15.1.3, 15.2.2, 15.2.3, 15.2.4, 15.2.5

**Injury or Damage to Person or Property**

3.18.1, 10.2.1, 10.2.2, 10.2.8, 10.3, 10.3.3, 10.4,

11.1.1

**Inspections**

3.1.3, 3.7.1, 4.2.2, 9.8.2, 9.9.2, 9.10.1, 13.5

**Instructions to Bidders**

1.1.1

**Instructions to the Contractor**

3.1.4, 3.3.3, 3.7.1, 4.2.4, 5.2.1, 7, 8.2.2, 12.1, 13.5.2

**Instruments of Service, Definition of**

1.1.7, 1.5, 1.6

**Insurance**

6.1.1, 7.3.7, 8.2.2, 9.3.2, 9.8.4, 9.9.1, 9.10.2, 10.2.5,

11

**Insurance, Boiler and Machinery**

11.3.2

**Insurance, Contractor's Liability**

11.1

**Insurance, Effective Date of**

8.2.2, 11.1.2

**Insurance, Loss of Use**

11.3.3

**Insurance, Owner's Liability**

11.2

**Insurance, Property**

10.2.5, 11.3

**Insurance, Stored Materials**

9.3.2, 11.3.1

**INSURANCE AND BONDS**

11

**Insurance Companies, Consent to Partial Occupancy**

9.9.1, 11.3.1.5

**Insurance Companies, Settlement with**

11.3.10

**Intent of the Contract Documents**

1.2, 4.2.18, 4.2.19, 7.4

**Interest**

9.7, 13.6

**Interpretation**

1.4, 4.2.8, 4.2.17, 4.2.18

**Interpretations, Written**

4.2.17, 4.2.18, 4.2.20

**Joinder and Consolidation of Claims Required**

15.4.4

**Judgment on Final Award**

15.4.2

**Labor and Materials, Equipment**

1.1.3, 1.1.6, 3.4, 3.8.2, 3.8.3, 3.12.2, 3.12.3, 3.12.6,  
3.12.10, 3.13.1, 3.15.1, 5.2.1, 6.2.1, 7.3.7, 9.3.2, 9.3.3,  
9.5.1.3, 9.6, 9.10.2, 10.2.1.2, 11.3.1, 14.2.1, 14.2.2

**Labor Disputes**

8.3.1

**Laws and Regulations**

3.2.3, 3.2.4, 3.7, 3.13.1, 10.2.2, 10.2.3, 13.5.1, 14.2.1

**Liens**

2.1.2, 9.3.3, 9.10.2, 9.10.4, 15.2.8

**Limitation on Consolidation or Joinder**

15.4.4

**Limitations, Statutes of**

15.4.1

**Limitations of Authority**

3.12.4, 4.1.3, 4.2.16

**Limitations of Liability**

9.6.7, 11.1.1, 12.2

**Limitations of Time**

3.10.1, 4.2.17, 4.2.20, 8.2.1, 9.3.3, 9.6.1, 9.8.4, 9.10.2,  
10.2, 11.1.3, 12.1.1, 12.2.2.2, 12.2.5, 13.7, 14.1.1,  
15.2.6.1

**Loss of Use Insurance**

11.3.3

**Material Suppliers**

1.5.1, 1.5.2, 3.12, 4.2.6, 4.2.8, 9.3.1, 9.3.1.2, 9.3.3,  
9.5.3, 9.6.4, 9.6.5, 9.6.7, 9.10.5, 11.3.1

**Materials, Hazardous**

10.2.4, 10.3

**Materials, Labor, Equipment and**

1.1.3, 1.1.6, 1.5.1, 1.5.2, 3.4, 3.5, 3.8.2, 3.8.3, 3.12.2,  
3.12.3, 3.12.6, 3.12.10, 3.13.1, 5.2.1, 6.2.1, 9.3.1,  
9.3.2, 9.3.3, 9.5.1, 9.5.3, 9.6.4, 9.6.5, 9.6.7, 9.10.2,  
9.10.5, 10.2.1, 10.2.4, 10.3

**Means, Methods, Techniques, Sequences and**

**Procedures of Construction**

3.3.1, 3.12.10, 4.2.5, 4.2.11

**Mechanic's Lien**

2.1.2, 15.2.8

**Mediation**

8.3.1, 10.3.5, 15.2.1, 15.2.5, 15.2.6, 15.3, 15.4.1

**Minor Changes in the Work**

1.1.1, 3.12.8, 4.2.13, 7.1, 7.4

**MISCELLANEOUS PROVISIONS**

13

**Modifications, Definition of**

1.1.1

**Modifications to the Contract**

1.1.1, 1.1.2, 3.11, 4.1.3, 4.2.14, 5.2.3, 7, 11.3.1

**Mutual Responsibility**

6.2

**Nonconforming Work, Acceptance of**

9.4.3, 9.8.3, 12.3

**Nonconforming Work, Rejection and Correction of**

2.3, 2.4, 3.2.3, 3.7.3, 9.4.3.3, 9.8.2, 9.8.3, 9.9.1,  
11.1.1, 12.2.2.1, 12.2.3, 12.2.4, 12.2.5

**Notice**

1.5, 2.1.2, 2.2.1, 2.4, 3.2.4, 3.3.1, 3.7.1, 3.7.2, 3.7.5,  
3.9.2, 3.12.9, 5.2.1, 6.3, 9.4.1, 9.7, 9.10.1, 9.10.2,  
10.2.2, 10.2.6, 10.2.8, 10.3.2, 11.3.6, 12.2.2.1, 13.3,  
13.5.1, 13.5.2, 14.1.2, 14.2.2, 14.4.2, 15.1.2, 15.1.4,  
15.1.5.1, 15.2, 15.4.1

## Notice of Claims

3.7.2, 10.2.8, 15.1.2, 15.4.1

Notice of Testing and Inspections

13.5.1, 13.5.2

Notices, Permits, Fees and

3.7, 7.3.7, 10.2.2

Observations, On-Site

3.2.1, 9.5.1, 12.1.1

Occupancy

2.2.2, 9.6.6, 9.9, 11.3.1.5

On-Site Inspections

4.2.2, 9.10.1, 9.4.4, 9.5.1

Orders, Written

4.2.7, 4.2.18, 4.2.20

Other Contracts and Contractors

1.1.4, 3.14.2, 4.2.9, 6, 11.3.7, 12.1.2

## OWNER

2

Owner, Definition of

2.1.1

**Owner, Information and Services Required of the**

2.1.2, 2.2, 4.2, 6.1.2, 6.1.3, 6.2.5, 9.3.2, 9.6.1, 9.6.4, 9.9.2, 9.10.2, 10.3.3, 11.2, 11.3, 13.5.1, 13.5.2, 14.1.1, 14.1.3, 15.1.3

Owner's Authority

1.5, 2.1.1, 2.3, 2.4, 3.4.2, 3.12.10, 3.14.2, 4.1.2, 4.1.3, 4.2.8, 4.2.9, 5.2.1, 5.2.4, 5.4.1, 6.1, 6.3, 7.2, 7.3.1, 8.2.2, 9.3.1, 9.3.2, 9.5.1, 9.6.4, 9.9.1, 9.10.2, 10.3.2, 11.3.3, 11.3.10, 12.2.2.1, 12.3, 13.5.2, 14.2, 14.3.1, 14.4, 15.2.7

Owner's Financial Capability

2.2.1, 13.2.2, 14.1.1

**Owner's Liability Insurance**

11.2

Owner's Relationship with Subcontractors

1.1.2, 5.2.1, 5.3, 5.4.1, 9.6.4, 9.10.2, 14.2.2

**Owner's Right to Carry Out the Work**

2.4, 12.2.4, 14.2.2

**Owner's Right to Clean Up**

6.3

**Owner's Right to Perform Construction with Own Forces and to Award Other Contracts**

6.1

**Owner's Right to Stop the Work**

2.3

Owner's Right to Suspend the Work

14.3

Owner's Right to Terminate the Contract

14.2

**Ownership and Use of Drawings, Specifications and Other Instruments of Service**

1.1.1, 1.1.5, 1.5, 1.6, 3.11, 3.12.10, 3.17, 4.2.14, 4.2.18, 4.2.20

**Partial Occupancy or Use**

9.9, 11.3.1.5

**Patching, Cutting and**

3.14, 6.2.5

Patents and Copyrights, Royalties

3.17

**Payment, Applications for**

4.2.1, 4.2.7, 4.2.15, 7.3.9, 9.2, 9.3, 9.4, 9.5, 9.7, 9.10.1, 9.10.3, 9.10.5, 11.1.3

**Payment, Certificates for**

4.2.15, 7.3.9, 9.3, 9.4, 9.5, 9.6.1, 9.6.6, 9.7, 9.10.1, 9.10.3, 14.1.1.3, 15.1.3

**Payment, Failure of**

9.4.1, 9.5, 9.7, 14.1.1.3

Payment, Final

4.2.1, 9.8.2, 9.10, 11.1.2, 11.3.1, 11.3.5, 12.3, 15.2.1

**Payment Bond, Performance Bond and**

5.4.1, 7.3.7, 9.6.7, 9.10.2, 9.10.3, 11, 11.4

**Payments, Progress**

9.3.1, 9.4.2, 9.6

**PAYMENTS AND COMPLETION**

9, 14

Payments to Subcontractors

5.4.2, 9.3, 9.5.1.3, 9.5.3, 9.6.2, 9.6.3, 9.6.4, 9.6.7, 9.10.5, 14.2.1.2

PCB

10.3.1

**Performance Bond and Payment Bond**

5.4.1, 7.3.7, 9.6.7, 9.10.2, 9.10.3, 11, 11.4

**Permits, Fees, Notices and Compliance with Laws**

2.2.2, 3.7, 7.3.7.4, 10.2.2

**PERSONS AND PROPERTY, PROTECTION OF**

10

Polychlorinated Biphenyl

10.3.1

Product Data, Definition of

3.12.2

**Product Data and Samples, Shop Drawings**

3.11, 3.12, 4.2.9, 4.2.10, 4.2.14

**Progress and Completion**

8.2, 9.3.1, 9.4.2, 9.6, 9.8, 9.10, 14.2.4, 15.1.6

**Progress Payments**

9.3.1, 9.4.2, 9.6

**Project, Definition of**

1.1.4

Project Representatives

4.2.16

**Property Insurance**

10.2.5, 11.3

Project Schedule

3.10.1, 3.10.3, 3.10.4, 4.2.2, 4.2.3, 4.2.4

**PROTECTION OF PERSONS AND PROPERTY**

10

Regulations and Laws

1.5, 3.2.3, 3.6, 3.7, 3.12.10, 3.13, 4.1.1, 9.6.4, 9.9.1, 10.2.2, 11.1, 11.4, 13.1, 13.4, 13.5.1, 13.5.2, 13.6, 14.1.1, 14.2.1, 15.2.8, 15.4

Rejection of Work

3.5, 4.2.8, 12.2.1

Releases of and Waivers and of Liens

9.10.2

Init.

Representations  
 1.3, 2.2.1, 3.5, 3.12, 6.2.2, 8.2.1, 9.3.3, 9.4.3, 9.5.1,  
 9.8.2, 9.10.1  
 Representatives  
 2.1.1, 3.1.1, 3.9, 4.1.1, 4.2.1, 4.2.2, 4.2.10, 5.1.1,  
 5.1.2, 13.2.1  
 Requests for Information  
 4.2.20  
 Resolution of Claims and Disputes  
 15  
 Responsibility for Those Performing the Work  
 3.3.2, 3.7.3, 3.12.8, 3.18, 4.2.2, 4.2.5, 4.2.8, 5.3, 6.1.2,  
 6.2, 6.3, 9.5.1, 9.8.2, 10  
 Retainage  
 9.3.1, 9.6.2, 9.8.5, 9.9.1, 9.10.2, 9.10.3  
**Review of Contract Documents and Field  
 Conditions by Contractor**  
 1.2.2, 3.2, 3.7.3, 3.12.7  
 Review of Contractor's Submittals by Owner,  
 Construction Manager and Architect  
 3.10.1, 3.10.2, 3.11, 3.12, 4.2, 5.2, 5.2, 9.2, 9.8.2  
 Review of Shop Drawings, Product Data and Samples  
 by Contractor  
 3.12.5  
**Rights and Remedies**  
 1.1.2, 2.3, 2.4, 3.7.4, 3.15.2, 4.2.8, 5.3, 5.4, 6.1, 6.3,  
 7.3.1, 8.3, 9.5.1, 9.7, 10.2.5, 10.3, 12.2.2,  
 12.2.4, 13.4, 14, 15.4  
**Royalties, Patents and Copyrights**  
 3.17  
 Rules and Notices for Arbitration  
 15.4  
**Safety of Persons and Property**  
 10.2, 10.3, 10.4  
**Safety Precautions and Programs**  
 3.3.1, 3.12, 4.2.5, 5.3, 10.1, 10.2, 10.3, 10.4  
 Samples, Definition of  
 3.12.3  
**Samples, Shop Drawings, Product Data and**  
 3.11, 3.12, 4.2.9, 4.2.10  
**Samples at the Site, Documents and**  
 3.11  
**Schedule of Values**  
 9.2, 9.3.1  
 Schedules, Construction  
 3.10, 3.12.1, 3.12.2, 6.1.2, 15.1.5.2  
 Separate Contracts and Contractors  
 1.1.4, 3.12.5, 3.14.2, 4.2.6, 4.2.11, 6, 8.3.1, 12.1.2  
 Shop Drawings, Definition of  
 3.12.1  
**Shop Drawings, Product Data and Samples**  
 3.11, 3.12, 4.2.9, 4.2.10, 4.2.14  
**Site, Use of**  
 3.13, 6.1.1, 6.2.1  
 Site Inspections  
 3.2.2, 3.3.3, 3.7.1, 3.7.4, 4.2.2, 4.2.3, 4.2.15, 9.4.3.3,  
 9.8.3, 9.9.2, 9.10.1, 13.5

Site Visits, Architect's  
 3.7.4, 4.2.2, 4.2.15, 9.8.3, 9.9.2, 9.10.1, 13.5  
 Special Inspections and Testing  
 4.2.8, 12.2.1, 13.5  
 Specifications, Definition of  
 1.1.6  
**Specifications**  
 1.1.1, 1.1.6, 1.2.2, 1.5, 3.11, 3.12.10, 3.17, 4.2.14  
 Staffing Plan  
 4.2.3  
 Statute of Limitations  
 12.2.5, 13.7, 15.4.1.1  
 Stopping the Work  
 2.3, 9.7, 10.3, 14.1  
 Stored Materials  
 6.2.1, 9.3.2, 10.2.1.2, 10.2.4  
 Subcontractor, Definition of  
 5.1.1  
**SUBCONTRACTORS**  
 5  
 Subcontractors, Work by  
 1.2.2, 3.3.2, 3.12.1, 4.2.5, 5.2.3, 5.3, 5.4, 9.3.1.2, 9.6.7  
**Subcontractual Relations**  
 5.3, 5.4, 9.3.1.2, 9.6.2, 9.6.3, 9.10, 10.2.1, 14.1, 14.2  
 Submittals  
 3.2.3, 3.10, 3.11, 3.12, 4.2.9, 4.2.10, 4.2.11, 5.2.1,  
 5.2.3, 7.3.7, 9.2, 9.3, 9.8, 9.9.1, 9.10.2, 9.10.3, 11.1.3  
 Submittal Schedule  
 3.10.2, 3.12.5, 4.2.9, 4.2.10  
*(Paragraphs deleted)*  
**Substantial Completion**  
 8.1.1, 8.1.3, 8.2.3, 9.4.3.3, 9.8, 9.9.1, 9.10.3, 12.2.1,  
 12.2.2, 13.7  
 Substantial Completion, Definition of  
 9.8.1  
 Substitution of Subcontractors  
 5.2.3, 5.2.4  
 Substitution of Architect  
 4.1.4  
 Substitution of Construction Manager  
 4.1.4  
 Substitutions of Materials  
 3.4.2, 3.5, 7.3.8  
 Sub-subcontractor, Definition of  
 5.1.2  
 Subsurface Conditions  
 3.7.4  
**Successors and Assigns**  
 13.2  
**Superintendent**  
 3.9, 10.2.6  
**Supervision and Construction Procedures**  
 1.2.2, 3.3, 3.4, 3.12.10, 4.2.2, 4.2.3, 4.2.5, 4.2.8, 4.2.9,  
 4.2.10, 4.2.11, 6.1.3, 6.2.4, 7.1.3, 7.3.7, 8.2, 8.3.1,  
 9.4.3.3, 10, 12, 14, 15.1.3  
 Surety  
 5.4.1.2, 9.8.5, 9.10.2, 9.10.3, 14.2.2, 15.2.7

Surety, Consent of  
9.10.2, 9.10.3

Surveys  
1.1.7, 2.2.3

**Suspension by the Owner for Convenience**  
**14.3**

Suspension of the Work  
5.4.2, 14.3

Suspension or Termination of the Contract  
5.4.1.1, 14

Taxes  
3.6, 3.8.2.1, 7.3.7.4

**Termination by the Contractor**  
**14.1, 15.1.6**

**Termination by the Owner for Cause**  
5.4.1.1, **14.2, 15.1.6**

**Termination by the Owner for Convenience**  
**14.4**

Termination of the Contractor  
14.2.2

**TERMINATION OR SUSPENSION OF THE CONTRACT**  
**14**

**Tests and Inspections**  
3.1.4, 3.3.3, 4.2.2, 4.2.6, 4.2.8, 9.4.3.3, 9.8.3, 9.9.2, 9.10.1, 10.3.2, 12.2.1, **13.5**

**TIME**  
**8**

**Time, Delays and Extensions of**  
3.2.4, 3.7.4, 5.2.3, 7.2, 7.3.1, 7.4, **8.3, 9.5.1, 10.3.2, 14.3.2, 15.1.5, 15.2.5**

Time Limits  
2.1.2, 2.2, 2.4, 3.2.2, 3.10, 3.11, 3.12.5, 3.15.1, 4.2.1, 5.2, 5.3, 5.4, 6.2.4, 7.3, 7.4, 8.2, 9.2, 9.3.1, 9.3.3, 9.4.1, 9.4.2, 9.5, 9.6, 9.7, 9.8, 9.9, 9.10, 11.1.3, 11.4, 12.2, 13.5, 13.7, 14, 15

**Time Limits on Claims**  
3.7.4, 10.2.8, **13.7, 15.1.2**

Title to Work  
9.3.2, 9.3.3

**Transmission of Data in Digital Form**  
**1.6**

**UNCOVERING AND CORRECTION OF WORK**  
**12**

**Uncovering of Work**  
**12.1**

Unforeseen Conditions, Concealed or Unknown  
3.7.4, 8.3.1, 10.3

Unit Prices  
7.3.3.2, 7.3.4

Use of Documents  
1.1.1, 1.5, 2.2.5, 3.12.6, 5.3

**Use of Site**  
**3.13, 6.1.1, 6.2.1**

**Values, Schedule of**  
**9.2, 9.3.1**

Waiver of Claims by the Architect  
13.4.2

Waiver of Claims by the Construction Manager  
13.4.2

Waiver of Claims by the Contractor  
9.10.5, 13.4.2, 15.1.6

Waiver of Claims by the Owner  
9.9.3, 9.10.3, 9.10.4, 12.2.2.1, 13.4.2, 14.2.4, 15.1.6

Waiver of Consequential Damages  
14.2.4, 15.1.6

Waiver of Liens  
9.10.2, 9.10.4

**Waivers of Subrogation**  
6.1.1, **11.3.7**

**Warranty**  
**3.5, 4.2.15, 9.3.3, 9.8.4, 9.9.1, 9.10.4, 12.2.2**

Weather Delays  
15.1.5.2

**Work, Definition of**  
**1.1.3**

Written Consent  
1.5.2, 3.4.2, 3.7.4, 3.12.8, 3.14.2, 4.1.3, 9.3.2, 9.8.5, 9.9.1, 9.10.2, 9.10.3, 10.3.2, 11.4.1, 13.2, 13.4.2, 15.4.4.2

Written Interpretations  
4.2.17, 4.2.18

**Written Notice**  
2.3, 2.4, 3.3.1, 3.9, 3.12.9, 3.12.10, 5.2.1, 5.3, 5.4.1.1, 8.2.2, 9.4, 9.5.1, 9.7, 9.10, 10.2.2, 10.3, 11.1.3, 12.2.2, 12.2.4, **13.3, 13.5.2, 14, 15.4.1**

Written Orders  
1.1.1, 2.3, 3.9, 7, 8.2.2, 12.1, 12.2, 13.5.2, 14.3.1, 15.1.2

## ARTICLE 1 GENERAL PROVISIONS

### § 1.1 Basic Definitions

**§ 1.1.1 The Contract Documents.** The Contract Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter the Agreement), and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive or (4) a written order for a minor change in the Work issued by the Architect. Unless specifically enumerated in the Agreement, as to contractors, the Contract Documents also include the advertisement or invitation to bid, Instructions to Bidders, other information furnished by the Owner in anticipation of receiving bids or proposals, Owner-accepted portions of the Contractor's bid or proposal, and portions of addenda relating to bidding requirements) but do not include sample forms. The Contractor's execution of the Owner/Contractor Agreement, the Architect's execution of the Owner/Architect Agreement, and the Construction Manager's execution of the Owner/Construction Manager Agreement shall each constitute their acceptance of all terms herein related to the respective parties.

**§ 1.1.2 The Contract.** The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect or the Architect's consultants, (2) between the Owner and the Construction Manager or the Construction Manager's consultants, (3) between the Owner and the Architect or the Architect's consultants, (4) between the Contractor and the Construction Manager or the Construction Manager's consultants, (5) between the Owner and a Subcontractor or Sub-subcontractor (6) between the Construction Manager and the Architect, or (7) between any persons or entities other than the Owner and Contractor. The Construction Manager and Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate Contractor's performance of its duties.

**§ 1.1.3 The Work.** The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project. The Contractor acknowledges and agrees that the Contract Documents are sufficient to provide for the completion of the Work and that the Contract Documents include work (whether or not shown or described) which reasonably may be inferred to be required or useful for the completion of the Work in accordance with applicable laws, codes, and customary standards of the construction industry.

**§ 1.1.4 The Project.** The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by other Multiple Prime Contractors and by the Owner's own forces, including persons or entities under separate contracts not administered by the Construction Manager.

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

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

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

**§ 1.1.8 Initial Decision Maker.** The Initial Decision Maker is the person identified in the Agreement to render initial decisions on Claims in accordance with Section 15.2 and certify termination of the Agreement under Section 14.2.2.

Init.

§ 1.1.9 The term "Product(s)" as used in the Contract Documents refers to the materials, systems, and equipment provided by the Contractor for use in the Work of the Project.

§ 1.1.10 The terms "Warranty" and "Guarantee" as used in the Contract Documents shall have the same meaning and shall be defined as "legally enforceable assurance of satisfactory performance or quality of a product or Work."

§ 1.1.11 Where materials, systems, and equipment items are referred to in the singular, such reference shall not serve to limit the quantity required. The Contractor shall furnish quantities as required by the Contract Documents to complete the Work. Unless specifically limited in the Contract Documents, the words "furnish," "install," and "provide," or any combination thereof mean to furnish and incorporate into the Work, including all necessary labor, materials, and equipment and other items required to perform the Work indicated.

§ 1.1.12 The Project Manual is a volume assembled for the Work which may include the bidding requirements, sample forms, Conditions of the Contract, and Specifications.

### § 1.2 Correlation and Intent of the Contract Documents

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

§ 1.2.2 Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade. Where responsibility for particular Work is required of the Contractor, the Contractor shall not be released from that responsibility by reason of the specification or drawing which establishes the responsibility. Thus, the Contractor shall be responsible for all Work required of it, even though that responsibility may be shown only in that portion of the documents typically pertaining to another contractor or trade.

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

§ 1.2.4 If there should be a conflict between two or more of the Contract Documents then the following order of interpretation shall apply:

- .1 Where requirements specifically set forth in the applicable Agreement are in conflict with other Contract Documents, including but not limited to these General Conditions, the Agreement shall govern.
- .2 In all other instances, the conflict shall be resolved by complying with the provision that is most favorable to the Owner.
- .3 When a duplicate of material or equipment occurs in the Drawings, the Specifications or other Contract Documents, each Contractor shall be deemed to have bid on the basis of each furnishing such material or equipment. The Owner, with the assistance of the Architect and Construction Manager, will decide which Subcontractor(s) shall furnish the same.

### § 1.3 Capitalization

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

### § 1.4 Interpretation

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

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

§ 1.5.1 Unless otherwise indicated in the Contract Documents or the Owner/Architect Agreement, the Architect and the Architect's consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and unless otherwise indicated in the Contract Documents or the Owner/Architect Agreement, the Architect and the respective consultants will retain all common law, statutory and

Init.

other reserved rights, including copyrights. The Contractor, Subcontractors, sub-subcontractors, and material or equipment suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with this Project is not to be construed as publication in derogation of the Architect, or Architect's consultants' reserved rights.

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

#### **§ 1.6 Transmission of Data in Digital Form**

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

### **ARTICLE 2 OWNER**

#### **§ 2.1 General**

**§ 2.1.1** The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to matters requiring the Owner's approval or authorization subject to parameters of authority established by Owner's board of education. Except as otherwise provided in Article 4, the Construction Manager and the Architect do not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.

#### **§ 2.1.2**

#### **§ 2.2 Information and Services Required of the Owner**

**§ 2.2.1** Prior to commencement of the Work, the Contractor may request in writing that the Owner provide reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract. Thereafter, the Contractor may only request such evidence if (1) the Owner fails to make payments to the Contractor as the Contract Documents require; (2) a change in the Work materially changes the Contract Sum; or (3) the Contractor identifies in writing a reasonable concern regarding the Owner's ability to make payment when due. The Owner shall furnish such evidence as a condition precedent to commencement or continuation of the Work or the portion of the Work affected by a material change. After the Owner furnishes the evidence, the Owner shall not materially vary such financial arrangements without prior notice to the Contractor.

**§ 2.2.2** Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including, but not limited to, those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities. Unless otherwise provided under the Contract Documents, the Owner, through the Construction Manager, shall secure and pay for the building permit.

**§ 2.2.3** The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. Taking into account the Contractor's experience and expertise, and exercise of professional caution, the Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work. The Contractor shall not be entitled to additional compensation resulting from its failure to confirm the location of the site utilities or existing structures prior to bid opening.

**§ 2.2.4** Upon specific written request of the Contractor, the Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Contractor's performance of the Work with reasonable promptness after receiving the Contractor's written request for such information or services. Contracts with other Contractors alone shall not constitute sufficient Owner control for purposes of this section.



**§ 2.2.5** Unless otherwise provided in the Contract Documents, the Contractor shall receive at least one copy of the Contract Documents in pdf format (or another format reasonably approved by the Owner) for purposes of making reproductions pursuant to Section 1.5.2.

**§ 2.2.6** The Owner shall endeavor to forward all communications to the Contractor through the Construction Manager and shall contemporaneously provide the same communications to the Architect about matters arising out of or relating to the Contract Documents.

**§ 2.3 Owner's Right to Stop the Work**

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

**§ 2.4 Owner's Right to Carry Out the Work**

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a three-day period after receipt of written notice from the Owner or the Owner's designee (or immediately in the case of a threat to the safety of persons or property) to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, including any claim against the Contractor's Performance Bond, correct such deficiencies. In such case the Owner may deduct from payments then or thereafter due the Contractor the reasonable cost of correcting such deficiencies, including Owner's expenses, including any and all legal expenses incurred to effectuate and enforce this provision and compensation for the Construction Manager's and Architect's and their respective consultants' additional services made necessary by such default, neglect or failure. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner.

In the event the Owner directs another entity to perform the Contractor's Work pursuant to this section, that other entity shall charge the Contractor all costs for labor, material, and equipment plus administrative costs, profit, and overhead. The Contractor shall pay that other entity within ten (10) days of the date of invoice. If not paid within ten (10) days, the Contractor authorizes the Owner to withhold that amount from the Contractor and to pay the same to that other entity from the next payment due the Contractor. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner.

If the Architect, Construction Manager, Owner, or other contractors or consultants are required to provide additional services due to defects or deficiencies in the Contractor's work or by failure of the Contractor to perform under its agreement, the Contractor shall be responsible for all such costs and fees (including attorney fees), which shall promptly be paid to the Owner. The Owner, Contractor, Architect, and Construction Manager acknowledge that the Owner's receipt of such payment from the Contractor is a condition precedent to the Owner's obligation to make payment to those adversely affected.

This Section 2.4 allows the Owner to withhold payments from a non-performing Contractor irrespective of the termination procedure identified in Section 14.2, and the Owner may pursue either remedy, or both.

**ARTICLE 3 CONTRACTOR**

**§ 3.1 General**

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

**§ 3.1.1.1** Possession, sale, or consumption of alcoholic beverages on the construction site is strictly prohibited. The unlawful manufacture, distribution, dispensation, possession or use of drugs is prohibited on the construction site.

Init.

**§ 3.1.2** The plural term "Multiple Prime Contractors" refers to persons or entities who perform construction under contracts with the Owner that are administered by the Construction Manager. The term does not include the Owner's own forces, including persons or entities under separate contracts not administered by the Construction Manager.

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

**§ 3.1.4** The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Construction Manager or Architect in their administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor.

**§ 3.2 Review of Contract Documents and Field Conditions by Contractor**

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

**§ 3.2.2** Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Section 2.2.3, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report to the Construction Manager and Architect any errors, inconsistencies or omissions discovered by or made known to the Contractor as a request for information submitted to the Construction Manager in such form as the Construction Manager and Architect may require. It is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents.

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

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

**§ 3.2.5** It will be presumed that the Contractor's bid and the Contract sum include the cost of correcting any error, inconsistency, or omission, which could have been discovered by the exercise of reasonable diligence. Unless the Contractor establishes that such error, inconsistency, or omission could not have been discovered by the exercise of reasonable diligence, the Contractor will make such corrections without additional compensation so that the Work is fully functional.

**§ 3.3 Supervision and Construction Procedures**

**§ 3.3.1** The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instruction concerning these matters. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, the Contractor shall evaluate the jobsite safety thereof and, except as stated below, shall be fully and solely responsible for the jobsite safety of such means, methods, techniques, sequences or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely written notice to the Owner, the Construction Manager,

Init.

and the Architect and shall not proceed with that portion of the Work without further written instructions from the Architect, through the Construction Manager. If the Contractor is then instructed to proceed with the required means, methods, techniques, sequences or procedures without acceptance of changes proposed by the Contractor, the Owner shall be solely responsible for any loss or damage arising solely from those Owner-required means, methods, techniques, sequences or procedures. The Contractor shall immediately notify the Construction Manager of delays of other contractors that could impact timely coordination and completion of the Work.

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

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

#### § 3.4 Labor and Materials

§ 3.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work. Such provision of labor and materials shall occur in sufficient time to satisfy the existing Project schedule. The Contractor bears the risk of any failure to timely provide such labor and materials for any reason.

§ 3.4.2 Except in the case of minor changes in the Work authorized by the Architect in accordance with Sections 3.12.8 or 7.4, the Contractor may make substitutions only with the consent of the Owner, after evaluation by the Architect, in consultation with the Construction Manager, and in accordance with a Change Order or Construction Change Directive.

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

§ 3.4.4 The Contractor, Construction Manager, and Architect each respectively agree that neither they nor their subcontractors will discriminate against any employee or applicant for employment, to be employed in the performance of this contract, with respect to hire, tenure, conditions or privilege of employment, or any matter directly or indirectly related to employment, because of race, age, sex, color, religion, national origin, ancestry or physical disability. Breach of this covenant may be regarded as a material breach of this contract.

#### § 3.4.5 Asbestos-Free Product Installation

§ 3.4.5.1 It is hereby understood and agreed that no product and/or material containing asbestos including chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos and any combination of these materials that have been chemically treated and/or altered shall be installed or introduced into the Work by the contractor or his employees, agents, subcontractors, or other individuals or entities over whom the Contractor has control. If applicable, the Contractor shall be required to provide a signed certification statement ensuring that all products or materials installed or introduced into the work all be asbestos-free.

§ 3.4.5.2 The Contractor shall also be required to furnish certified statements from the manufacturers of supplied materials used during construction verifying their products to be asbestos-free in accordance with the requirements of Section 3.4.5.1.

§ 3.4.5.3 The Contractor shall complete and submit to the Owner a certification evidencing asbestos-free product installation prior to issuance of the final Certificate for Payment, in a form acceptable to the Owner.

#### § 3.5 Warranty

Init.

In addition to any other warranties, guarantees or obligations set forth in the Contract Documents or applicable as a matter of a law and not in limitation of the terms of the Contract Documents, the Contractor warrants and guarantees that:

1. The Owner will have good title to the Work and all materials and equipment incorporated into the Work and, unless otherwise expressly provided in the Contract Documents, will be of good quality and new;
2. The Work and all materials and equipment incorporated into the Work will be free from all defects, including any defects in workmanship or materials;
3. The Work and all equipment incorporated into the Work will be fit for the purpose for which they are intended;
4. The Work and all materials and equipment incorporated into the Work will be merchantable; and
5. The Work and all materials and equipment incorporated into the Work will conform in all respects to the Contract Documents.

If required by the Construction Manager or Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. Work, materials, or equipment not conforming to these requirements may be considered defective.

Upon notice of the breach of any of the foregoing warranties or guarantees or any other warranties or guarantees under the Contract Documents, the Contractor, in addition to any other requirements in the Contract Documents, will commence to correct such breach within seventy-two (72) hours after written notice thereof and thereafter will use its best efforts to correct such breach to the satisfaction of the Owner; provided that if such notice is given after final payment hereunder, such seventy-two (72) hour period shall be extended to seven (7) days. The foregoing warranties and obligations of the Contractor shall survive the final payment and/or termination of the Contract.

The Contractor shall, at the time of final completion of the Work and as a condition precedent to final payment to the Contractor, assign to the Owner all manufacturers' warranties related to the materials and labor used in the Work. The Contractor further agrees to perform the Work in such manner as to preserve any and all such manufacturers' warranties and deliver to the Owner the warranties, project manuals, operating procedures, and other materials related to each of the building systems and materials included in the Contractor's Work and as required by the Specifications.

### § 3.6 Taxes

The Contractor shall pay sales, consumer, use and similar taxes for the Work or portions thereof provided by the Contractor that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect. The Contractor shall also pay all state and federal taxes levied on its business, income or property and shall make all contributions for social security and other wage or payroll taxes. The Contractor shall be solely responsible for such payments and shall hold the Owner harmless from same.

### § 3.7 Permits, Fees, Notices, and Compliance with Laws

§ 3.7.1 Unless otherwise provided in the Contract Documents, the Owner, through the Construction Manager, shall secure and pay for the building permit. The Contractor shall secure and pay for other permits, fees, licenses and inspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded.

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

§ 3.7.3 If the Contractor performs Work contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

§ 3.7.4 **Concealed or Unknown Conditions.** If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide written and dated notice to the Owner, Construction Manager, and the Architect before conditions are disturbed and in no event later than 21 days after first observance of the conditions. The Architect and Construction Manager will promptly investigate such conditions and, if the Owner and the Architect, in

Init.

consultation with the Construction Manager, determine that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, they will recommend an equitable adjustment in the Contract Sum or Contract Time, or both. If the Owner and the Architect, in consultation with the Construction Manager, determine that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Architect shall promptly notify the Owner, Construction Manager, and Contractor in writing, stating the reasons. If the Contractor disputes the determination or recommendation, the Contractor shall proceed as provided in Article 15. The requirements of Section 2 of 1998 PA 57, as amended, are hereby incorporated into this document. The Contractor shall be alert to any indication or evidence of existing underground or concealed utilities or structures not shown on the Contract Documents and shall immediately notify the Owner of discovery of such evidence. If the Contractor encounters such utilities or structures, it shall cease operations immediately to minimize damage and shall notify the Owner and Architect. The Contractor shall bear the cost of damage resulting from its failure to exercise reasonable care in its construction activity or from continuing operations without notifying the Owner.

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

### **§ 3.8 Allowances**

**§ 3.8.1** The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection.

**§ 3.8.2** Unless otherwise provided in the Contract Documents:

- .1 Allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- .2 Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum but not in the allowances; and
- .3 Whenever costs are less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 3.8.2.1 and (2) changes in Contractor's costs under Section 3.8.2.2.

**§ 3.8.3** Materials and equipment under an allowance shall be selected by the Owner with reasonable promptness.

### **§ 3.9 Superintendent**

**§ 3.9.1** The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor. The superintendent and any other personnel shall be satisfactory to the Owner in all respects, and the Owner shall have the right to require the Contractor to remove the superintendent and any other personnel from the Project whose performance is not satisfactory to the Owner and to replace such superintendent or other personnel with another who is satisfactory to the Owner.

**§ 3.9.2** The Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner and Architect through the Construction Manager, the name and qualifications of a proposed superintendent. The Owner and/or Construction Manager may reply within 14 days to the Contractor in writing stating (1) whether the Owner, the Construction Manager, or the Architect has reasonable objection to the proposed superintendent or (2) that any of them require additional time to review.

§ 3.9.3 The Contractor shall not employ a proposed superintendent to whom the Owner, Construction Manager or Architect has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's consent, except with another superintendent who is satisfactory to the Owner.

### § 3.10 Contractor's Construction Schedules

§ 3.10.1 The Contractor, promptly after being awarded the Contract, shall prepare and submit for the Owner's and Architect's information and the Construction Manager's approval a Contractor's construction schedule for the Work. The schedule shall not exceed time limits current under the Contract Documents, shall be revised at appropriate intervals as required by the conditions of the Work and Project, shall be related to the entire Project schedule to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work. In no event shall the Contractor's Construction Schedule be extended due to action or inaction of the Contractor, except with prior written approval of the Owner within the Owner's sole discretion.

The Contractor shall cooperate with the Construction Manager in scheduling and performing the Contractor's Work to avoid conflict with, and as to cause no delay in, the work or activities of other Multiple Prime Contractors or the construction or operations of the Owner's own forces.

§ 3.10.2 The Contractor shall prepare a submittal schedule, promptly after being awarded the Contract and thereafter update it as necessary to maintain a current submittal schedule, and shall submit the schedule(s) for the Construction Manager's, Owner's and Architect's approval, which approval shall not unreasonably be delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, (2) allow for a reasonable time to review submittals, and (3) shall provide for expeditious and practical execution of the Work. If the Contractor fails to submit a submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.

§ 3.10.3 The Contractor shall participate with other Contractors, the Construction Manager and Owner in reviewing and coordinating all schedules for incorporation into the Project schedule that is prepared by the Construction Manager. The Contractor shall make revisions to the construction schedule and submittal schedule as deemed necessary by the Construction Manager to conform to the Project schedule.

§ 3.10.4 The Contractor shall perform the Work in accordance with the most recent approved project schedule and the most recent work schedule submitted by the contractor to the Owner, Construction Manager and Architect and incorporated into the approved Project schedule.

§ 3.10.5 The Contractor shall cooperate with the Construction Manager in scheduling and performing its Work to avoid conflict or interference with the Work of others, and the Contractor shall be responsible for any conflict or interferences that it causes. The Construction Manager and the Contractor acknowledge and understand that the work schedule will be modified from time-to-time with the Owner's approval to coordinate with the work of others and that such schedule changes do not give rise to a claim for damages or additional compensation by the Contractor for delay or otherwise. The Contractor shall be required to conform to the most recent Owner-approved schedule and acknowledges that fact was taken into account when it agreed to the Contract Sum and entered into this Contract.

§ 3.10.6 The Contractor shall cooperate with the Construction Manager in working out and following the proper sequence of operations between the Work of the Contractor and that of other trades on the site.

§ 3.10.7 The Contractor shall prosecute the Work undertaken in a prompt and diligent manner whenever the Work (or a part thereof) becomes available, or at such other time as the Owner and/or Construction Manager may direct so as to promote the general progress of the entire construction. The Contractor shall not, by delay or otherwise, interfere with or hinder the Work of the Construction Manager or any other Contractor. Any materials that are to be furnished by the Contractor shall be furnished in sufficient time to enable the Contractor to perform and complete its Work within the time or times provided in the schedule. If the Contractor shall, through its action or inactions, including the actions or inactions of its' subcontractors or suppliers, fall behind in furnishing necessary labor and/or materials to meet the construction needs in accordance with the established schedule, then it shall increase its forces or work such overtime as may be required, at its own expense, to bring its part of the work up to the proper schedule. In the event that the Contractor does not take such action necessary to bring its part of the work up to schedule, as determined by the Construction Manager, then the Owner may supplement the Contractor's forces or take other action permitted under Section 2.4. The Contractor shall be responsible for any and all costs of performing or completing the Work and shall pay any such sums within ten (10) days of an invoice. If not paid within ten (10) days, the amount will be withheld

from the Contractor's next payment and paid to the relevant parties. If the amounts withheld from payments then or thereafter due Contractor are insufficient to cover such costs, the Owner may bill these costs to the Contractor, and the Contractor shall pay any such sums within ten (10) days of an invoice. Exercise of such rights shall in no way limit or jeopardize the Owner's right to any other remedy, including but not limited to a claim against the Performance Bond of the Contractor.

### **§ 3.11 Documents and Samples at the Site**

The Contractor shall maintain at the site for the Owner one copy of the Drawings, Specifications, Addenda, Change Orders and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and one copy of approved Shop Drawings, Product Data, Samples and similar required submittals. These documents shall be available to the Architect and delivered to the Construction Manager for submittal to the Owner upon completion of the Work as a record of the Work as constructed.

### **§ 3.12 Shop Drawings, Product Data and Samples**

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

**§ 3.12.2** Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor for submittal to and review by the Architect to illustrate materials or equipment for some portion of the Work. All Work shall be furnished and installed in accordance with the Drawings, Specifications and as additionally required by the manufacturer's printed instructions. The Contractor shall review the manufacturer's instructions, and where conflict occurs between the Drawings or Specifications and the manufacturer's instructions, the Contractor shall request clarification from the Architect prior to commencing the Work.

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

**§ 3.12.4** Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. Their purpose is to demonstrate the way by which the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Architect and Construction Manager is subject to the limitations of Sections 4.2.9 through 4.2.11. Informational submittals upon which the Construction Manager and Architect are not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Construction Manager or Architect without action.

**§ 3.12.5** The Contractor shall review for compliance with the Contract Documents, approve and submit to the Construction Manager Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents in accordance with the Project submittal schedule approved by the Construction Manager and Architect, or in the absence of an approved Project submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of other Multiple Prime Contractors or the Owner's own forces. The Contractor shall cooperate with the Construction Manager in the coordination of the Contractor's Shop Drawings, Product Data, Samples and similar submittals with related documents submitted by other Multiple Prime Contractors.

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

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

**§ 3.12.8** The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Architect's review and approval of

Shop Drawings, Product Data, Samples or similar submittals unless the Contractor has specifically informed the Construction Manager and Architect in a detailed writing of such deviation at the time of submittal and (1) the Architect has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples or similar submittals by the Architect's approval thereof.

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

**§ 3.12.10** The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. The Contractor shall not be required to provide professional services in violation of applicable law. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of the Contractor by the Contract Documents, the Owner and the Architect will specify all performance and design criteria that such services must satisfy. The Contractor shall cause such services or certifications to be provided by a properly licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect. The Owner and the Architect shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications and approvals performed or provided by such design professionals, provided the Owner and Architect have specified to the Contractor all performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Architect will review, approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Contractor shall not be responsible for the adequacy of the performance and design criteria specified in the Contract Documents.

### **§ 3.13 Use of Site**

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

**§ 3.13.2** The Contractor shall coordinate the Contractor's operations with, and secure the approval of, the Construction Manager before using any portion of the site.

### **§ 3.14 Cutting and Patching**

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

**§ 3.14.2** The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner's own forces or of other Multiple Prime Contractors by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter such construction by the Owner's own forces or by other Multiple Prime Contractors except with written consent of the Construction Manager, Owner and such other Multiple Prime Contractors; such consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold from the other Multiple Prime Contractors or the Owner the Contractor's consent to cutting or otherwise altering the Work.

### **§ 3.15 Cleaning Up**

**§ 3.15.1** The Contractor and its Subcontractors shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under the Contract. At completion of the Work the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery and surplus materials from and about the Project.



**§ 3.15.2** If the Contractor fails to clean up as provided in the Contract Documents, the Owner, or Construction Manager with the Owner's approval, may do so and the Owner shall be entitled to reimbursement from the Contractor.

**§ 3.15.3** Any areas and/or concurrently occupied space both occupied by the Owner and used in the progress of the Work, whether within the limits of the construction site or the adjacent areas leading to it, shall be maintained in a clean and safe condition and open to travel. Failure by the Contractor to maintain said areas will result in the Owner's cleaning of same, at the expense of the Contractor.

**§ 3.16 Access to Work**

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

**§ 3.17 Royalties, Patents and Copyrights**

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and indemnify and hold harmless the Owner, Construction Manager and Architect from any and all cost, damage and loss on account thereof, including, but not limited to actual attorneys' fees, but shall not be responsible for such defense or loss when a particular design, process or product of a particular manufacturer or manufacturers is required by the Contract Documents or where the copyright violations are contained in Drawings, Specifications or other documents prepared by the Owner, Architect, or Construction Manager. However, if the Contractor has reason to believe that the required design, process or product is an infringement of a copyright or a patent, the Contractor shall be responsible for such loss unless such information is promptly furnished to the Architect through the Construction Manager. The review by the Owner of any method of construction, invention, appliance, process, article, device or materials of any kind shall be for its adequacy as integrated into the Work and shall not be an approval for the use thereof by the Contractor in violation of any patent or other rights of any third person.

**§ 3.18 Indemnification**

**§ 3.18.1** To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Construction Manager, Architect, Construction Manager's and Architect's consultants, and agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or in any way related to performance of the Work, or the duties or obligations of this Agreement or the failure of the Contractor or the Work to conform with the Contract Documents, caused in whole or in part by any acts or omissions of the Contractor, a Subcontractor, or anyone directly or indirectly employed by them or anyone for whose acts of any of them may be liable. The Contractor's indemnification responsibility shall be to the fullest degree of Contractor's fault, on a comparative basis (or the fault of any others for whom the Contractor is responsible), and the Contractor shall not be obligated to indemnify a party for that party's own negligence. The Contractor shall be responsible to the Owner, Construction Manager, Architect, Architect's consultants and agents and employees of any of them from and against all amounts such parties may be required to pay in attorney fees in order to pursue enforcement of this provision against the Contractor or otherwise obtain indemnification from the Contractor provided under the terms of this Section 3.18. Such obligation shall not be construed to negate, abridge or reduce any other rights or obligations of indemnity which would otherwise exist as to any party or person set forth in this section. To the fullest extent permitted by law, the Contractor shall indemnify the Owner and save the Owner harmless against all loss by fines, penalties or corrective measures resulting from negligent or wrongful acts or omissions by the Contractor, its Subcontractors, agents, employees or assigns, with respect to the violation of safety requirements of this Contract, including reasonable attorney fees.

**§ 3.18.2** In addition to and not in limitation of the Contractor's other indemnity obligations, the Contractor hereby accepts and assumes exclusive liability for and shall indemnify and save harmless the Owner, Construction Manager and Architect from and against the payment of the following:

All contributions, taxes or premiums (including interest and penalties thereon) which may be payable under the unemployment insurance law of any state, the federal Social Security Act, federal, state, county and/or municipal tax withholding laws, or any other law, measured upon the payroll of or required to be withheld from employees by whomsoever employed, engaged in the Work to be performed and furnished under this Contract;

All sales, use, personal property and other taxes (including interest and penalties thereon) required by any federal, state, county, municipal or other law to be paid or collected by the Contractor or any of its Subcontractors or vendors or any other person or persons acting for, through or under it or any of them, by reason of the performance of the Work

or the acquisition, ownership, furnishing, or use of any materials, equipment, supplies, labor, services or other items for or in connection with the Work;

All pension, welfare, vacation, annuity and other benefit contributions payable under or in connection with respect to all persons by whomsoever employed, engaged in the Work to be performed and furnished under this Contract.

The Contractor shall indemnify and hold the Owner harmless from any claim, damage, loss or expense, including but not limited to actual attorney fees, incurred by the Owner related to any hazardous material or waste, toxic substance, pollution or contamination brought into the Project site or caused by the Contractor or used, handled, transported, stored, removed, remediated, disturbed or dispersed of by Contractor.

**§ 3.18.3** In the event that any claim is made or asserted, or lawsuit filed for damages or injury arising out of or resulting from the performance of the Work, whether or not the Owner is named as a party, the Contractor shall immediately advise the Owner, in writing, of such claim or lawsuit and shall provide a full and complete copy of any documents or pleadings thereto, as well as a full and accurate report of the facts involved.

#### **ARTICLE 4 ARCHITECT AND CONSTRUCTION MANAGER**

##### **§ 4.1 General**

**§ 4.1.1** The Architect is the person lawfully licensed to practice architecture or an entity lawfully practicing architecture in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Architect," "Architect/Engineer," "Engineer," or "Design Professional" as used herein means the Architect or the Architect's authorized representative.

**§ 4.1.2** The construction manager is lawfully licensed to practice construction management or an entity lawfully performing construction management in the jurisdiction where the Project is located. That person or entity is identified as the Construction Manager in the Agreement and is referred to throughout the Contract Documents as if singular in number.

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

**§ 4.1.4** If the employment of the Construction Manager or Architect is terminated, the Owner shall employ a successor construction manager or architect whose status under the Contract Documents shall be that of the Construction Manager or Architect, respectively.

##### **§ 4.2 Administration of the Contract**

**§ 4.2.1** The Construction Manager and Architect will provide administration of the Contract as described in the Contract Documents and will be the Owner's representatives during construction until the date the Architect issues the final Certificate for Payment and with the Owner's written concurrence during the correction period. The Construction Manager and Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents.

**§ 4.2.2** The Architect will visit the site at intervals appropriate to the stage of construction, or more frequently, as agreed with the Owner or required by law, to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. Subject to the Owner/Architect Agreement, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. On the basis of the site visits, the Architect will keep the Owner reasonably informed about the progress and quality of the portion of the Work completed, will guard the Owner against defects and deficiencies in the work, and report to the Owner and Construction Manager (1) known deviations from the Contract Documents and from the most recent Project schedule prepared by the Construction Manager, and (2) defects and deficiencies observed in the Work.

**§ 4.2.3** The Construction Manager shall provide a staffing plan to include one or more representatives who shall be in attendance at the Project site whenever the Work is being performed. The Construction Manager will determine in general if the Work observed is being performed in accordance with the Contract Documents, will keep the Owner

Init.

reasonably informed of the progress of the Work, and will report to the Owner and Architect (1) known deviations from the Contract Documents and the most recent Project schedule, and (2) defects and deficiencies observed in the Work.

**§ 4.2.4** The Construction Manager will schedule and coordinate the activities of the Contractor and other Multiple Prime Contractors in accordance with the latest approved Project schedule and shall supervise construction as required by 1937 PA 306.

**§ 4.2.5** The Construction Manager, except to the extent required by Section 4.2.4, and Architect, except as may be required under 1937 PA 306 and/or 1980 PA 299, will not have control over, or charge of, construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents, except as provided in Section 3.3.1, and, except as provided herein or in their respective agreements with the Owner, neither will be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. Except as identified in their respective Agreements with the Owner, neither the Construction Manager nor the Architect will have control over or charge of or be responsible for acts or omissions of the Contractor, Subcontractors, or their agents or employees, or of any other persons or entities performing portions of the Work. The Construction Manager will schedule and coordinate the work of all Contractors on the Project, including the Contractors' use of the site. The Construction Manager will keep the Contractors informed of the Project Construction Schedule to enable the Contractors to plan and perform the Work in a timely manner.

**§ 4.2.6 Communications Facilitating Contract Administration.** Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized, the Owner and Contractor shall endeavor to communicate with each other through the Construction Manager, and shall contemporaneously provide the same communications to the Architect about matters arising out of or relating to the Contract Documents. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and material suppliers shall be through the Contractor. Communications by and with other Multiple Prime Contractors shall be through the Construction Manager and shall be contemporaneously provided to the Architect if those communications are about matters arising out of or related to the Contract Documents. Communications by and with the Owner's own forces shall be through the Owner.

**§ 4.2.7** The Construction Manager and Architect will review and certify all Applications for Payment by the Contractor, in accordance with the provisions of Article 9.

**§ 4.2.8** The Architect and Construction Manager have authority to reject Work that does not conform to the Contract Documents and will notify each other about the rejection. The Construction Manager shall determine in general whether the Work of the Contractor is being performed in accordance with the requirements of the Contract Documents and notify the Owner, Contractor and Architect of defects and deficiencies in the Work. Whenever the Construction Manager considers it necessary or advisable, the Construction Manager will have authority to require additional inspection or testing of the Work in accordance with Sections 13.5.2 and 13.5.3, upon written authorization of the Owner, whether or not such Work is fabricated, installed or completed. The foregoing authority of the Construction Manager will be subject to the provisions of Sections 4.2.18 through 4.2.20 inclusive, with respect to interpretations of the Architect. However, neither the Architect's nor the Construction Manager's authority to act under this Section 4.2.8 nor a decision made by either of them in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect or the Construction Manager to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons performing any of the Work.

**§ 4.2.9** The Construction Manager will receive and promptly review for conformance with the submittal requirements of the Contract Documents, all submittals from the Contractor such as Shop Drawings, Product Data and Samples. Where there are Multiple Prime Contractors, the Construction Manager will also check and coordinate the information contained within each submittal received from Contractor and other Multiple Prime Contractors, and transmit to the Architect those recommended for approval. By submitting Shop Drawings, Product Data, Samples and similar submittals, the Construction Manager represents to the Owner and Architect that the Construction Manager has reviewed and recommended them for approval. The Construction Manager's actions will be taken in accordance with the Project submittal schedule approved by the Architect or, in the absence of an approved Project submittal schedule, with reasonable promptness while allowing sufficient time to permit adequate review by the Architect.

Init.

§ 4.2.10 The Architect will review and approve or take other appropriate action upon the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect's action will be taken in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Architect's professional judgment to permit adequate review. Upon the Architect's completed review, the Architect shall transmit its submittal review to the Construction Manager.

§ 4.2.11 Review of the Contractor's submittals by the Construction Manager and Architect is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Construction Manager and Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5 and 3.12. The Construction Manager and Architect's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Construction Manager and Architect, of any construction means, methods, techniques, sequences or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component. However, should the Construction Manager or Architect discover during the course of such review any inaccuracies, incompleteness, or other irregularities, they shall immediately notify the Owner of the same to determine an appropriate corrective course of action or notify the Contractor of the same to correct the irregularities.

§ 4.2.12 The Construction Manager will prepare Change Orders and Construction Change Directives.

§ 4.2.13 The Construction Manager and the Architect will take appropriate action on Change Orders or Construction Change Directives in accordance with Article 7 and the Architect will have authority to order minor changes in the Work as provided in Section 7.4. The Architect, in consultation with the Construction Manager, will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4.

§ 4.2.14 The Construction Manager will maintain at the site for the Owner one copy of all Contract Documents, approved Shop Drawings, Product Data, Samples and similar required submittals, in good order and marked currently to record all changes and selections made during construction. These will be available to the Architect and the Contractor, and will be delivered to the Owner in good condition and reasonably organized upon completion of the Project.

§ 4.2.15 The Construction Manager will assist the Architect in conducting inspections to determine the dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion in conjunction with the Architect pursuant to Section 9.8; and receive and forward to the Owner written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10. The Construction Manager will forward to the Architect a final Application and Certificate for Payment or final Project Application and Project Certificate for Payment upon the Contractor's compliance with the requirements of the Contract Documents.

§ 4.2.16 If the Owner and Architect agree, the Architect will provide one or more project representatives to assist in carrying out the Architect's responsibilities at the site. The duties, responsibilities and limitations of authority of such project representatives shall be as set forth in an exhibit to be incorporated in the Contract Documents.

§ 4.2.17 The Architect will interpret matters concerning performance under, and requirements of the Contract Documents on written request of the Construction Manager, Owner or Contractor through the Construction Manager. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness.

§ 4.2.18 Interpretations of the Architect will be consistent with the intent of and reasonably inferable from the Contract Documents and will be in writing or in the form of drawings. When making such interpretations, the Architect will endeavor to secure faithful performance by Contractor, and will not be liable for results of interpretations so rendered in good faith and without negligence.

§ 4.2.19 The Architect's interpretations on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents and acceptable to the Owner.

§ 4.2.20 The Construction Manager will receive and review requests for information from the Contractor, and forward each request for information to the Architect, with the Construction Manager's recommendation. The Architect will review and respond in writing to the Construction Manager to requests for information about the Contract Documents. The Construction Manager's recommendation and the Architect's response to each request will be made in writing within any time limits agreed upon or otherwise with reasonable promptness given the particular circumstances. If appropriate, the Architect will prepare and issue supplemental Drawings and Specifications in response to the requests for information.

## ARTICLE 5 SUBCONTRACTORS

### § 5.1 Definitions

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

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

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

§ 5.2.1 Unless otherwise stated in the Contract Documents or the bidding requirements, the Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Construction Manager for review by the Owner, Construction Manager and Architect the names of persons or entities (including those who are to furnish supplies, materials or equipment, including those fabricated to a special design) proposed for each principal portion of the Work. The Construction Manager will reply within 14 days to the Contractor in writing stating (1) whether the Owner, the Construction Manager or the Architect has reasonable objection to any such proposed person or entity or, (2) that the Construction Manager, Architect or Owner requires additional time for review. The Contractor shall remain, in all instances, jointly and severally liable to the Owner for all acts or omissions of its Subcontractor. All contractual agreements with additional persons or entities serving as a subcontractor shall incorporate the Contract Documents, expressly identify the Owner as a third-party beneficiary, give the Owner all rights against the Subcontractor that it would have against the Contractor, and state that the Owner shall enjoy all third-party beneficiary rights not prohibited by law.

§ 5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner, Construction Manager or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

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

§ 5.2.4 The Contractor shall not substitute a Subcontractor, person or entity previously selected if the Owner, Construction Manager or Architect makes reasonable objection to such substitution. The Contractor shall notify the Owner, the Architect, and the Construction Manager of any proposed subcontractor substitution a minimum of 10 days prior to such proposed change.

### § 5.3 Subcontractual Relations

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

### § 5.4 Contingent Assignment of Subcontracts

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

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

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

§ 5.4.2 Upon such assignment, if the Work has been suspended for more than 30 days, the Subcontractor's compensation may be equitably adjusted as negotiated by the parties.

§ 5.4.3 Upon such assignment to the Owner under this Section 5.4, the Owner may further assign the subcontract to a successor Contractor or other entity.

## ARTICLE 6 CONSTRUCTION BY OWNER OR BY OTHER CONTRACTORS

### § 6.1 Owner's Right to Perform Construction with Own Forces and to Award Other Contracts

§ 6.1.1 The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, which include persons or entities under separate contracts not administered by the Construction Manager, and to award other contracts in connection with other portions of the Project or other construction or operations on the site under Conditions of the Contract identical or substantially similar to these including those portions related to insurance. The Construction Manager and Contractor shall be responsible for coordinating the Work with the work of other Contractors, including the Owner's own forces or separate contractors, so as to complete the Work in accordance with the Project time schedule.

§ 6.1.2 When the Owner performs construction or operations with the Owner's own forces including persons or entities under separate contracts not administered by the Construction Manager, the Owner shall provide for coordination of such forces with the Work of the Contractor, who shall cooperate with them.

### § 6.1.3

### § 6.2 Mutual Responsibility

§ 6.2.1 The Contractor shall afford the Owner's own forces, Construction Manager and other Multiple Prime Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.

Init.

§ 6.2.2 If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner's own forces or other Multiple Prime Contractors, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the Construction Manager and Architect apparent discrepancies or defects in such other construction that would render it unsuitable for such proper execution and results. Failure of the Contractor so to report shall constitute an acknowledgment that the Owner's own forces or other Multiple Prime Contractors' completed or partially completed construction is fit and proper to receive the Contractor's Work, except as to defects not then reasonably discoverable.

§ 6.2.3 The Contractor shall reimburse the Owner for costs the Owner incurs, including costs that are payable to a separate contractor or to other Multiple Prime Contractors because of the Contractor's delays, improperly timed activities or defective construction.

§ 6.2.4 The Contractor shall promptly remedy damage the Contractor causes to completed or partially completed construction or to property of the Owner, Construction Manager, separate contractors, or other Multiple Prime Contractors as provided in Section 10.2.5. Should a claim be made that the Contractor wrongfully delayed or caused damage to the Work or property of another contractor, the Contractor shall promptly settle the dispute with such other contractor. If a separate contractor sues the Owner on account of any delay or damage alleged to have been caused by the Contractor, the Construction Manager (on the Owner's behalf) shall notify the Contractor who shall defend such proceedings at the Contractor's sole expense. If any judgment or award against the Owner arises therefrom, the Contractor shall pay or satisfy it and shall reimburse the Owner for all costs, including attorneys' fees and court costs, which the Owner may have incurred.

*(Paragraph deleted)*

### § 6.3 Owner's Right to Clean Up

If a dispute arises among the Contractor, other Multiple Prime Contractors and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and allocate the cost among those responsible. The Owner's right to clean up shall in no event be deemed a duty, and should the Owner choose not to pursue this remedy, the Contractor necessitating such action shall remain fully responsible for the same.

## ARTICLE 7 CHANGES IN THE WORK

### § 7.1 General

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

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

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

§ 7.1.4 Where a change in the Work requires overtime labor, and the Owner approves in advance such overtime labor in writing, the cost to the Owner of overtime labor shall be determined by the actual premium wages paid for such overtime labor, over and above the cost of straight time wages, plus payroll charges applicable thereto, plus the cost of direct additional expenses relating to the overtime work, plus a percentage for the Contractor's overhead cost as stipulated in the Contract. No Contractor profit shall be included in such cost. Overtime labor caused by Contractor's failure to timely and/or properly perform shall be at no additional cost to the Owner.

### § 7.2 Change Orders

A Change Order is a written instrument prepared by the Construction Manager and signed by the Owner, Construction Manager, Architect and Contractor, stating their agreement upon all of the following:

- .1 The change in the Work;

Init.

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

§ 7.2.3 The Contractor's agreement on any Change Order shall constitute its final settlement of all matters relating to the direct and indirect costs associated with such change and any and all related adjustments to the Contract Sum and the Contract Time.

### § 7.3 Construction Change Directives

§ 7.3.1 A Construction Change Directive is a written order prepared by the Construction Manager and signed by the Owner, Construction Manager and Architect, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

§ 7.3.2 A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order.

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

- .1 Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- .2 Unit prices stated in the Contract Documents or subsequently agreed upon;
- .3 Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
- .4 As provided in Section 7.3.7.

§ 7.3.4 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed in a proposed Change Order or Construction Change Directive so that application of such unit prices to quantities of Work proposed will cause substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted, unless the Contractor provided such unit prices as part of a competitive bid.

§ 7.3.5 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Construction Manager and Architect of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time. Contractor agreements to a Construction Change Directive shall require a follow-up writing or signature as contemplated in Section 7.3.6.

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

§ 7.3.7 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Construction Manager shall determine, with the Owner's approval, the method and the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable amount. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the Construction Manager may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.7 shall be limited to a reasonable amount of the following:

- .1 Costs of labor, including social security, old age and unemployment insurance, fringe benefits required by agreement or custom, and workers compensation insurance;
- .2 Costs of materials, supplies and equipment, including cost of transportation, whether incorporated or consumed;
- .3 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others;

Init.



- .4 Costs of premiums for all bonds and insurance, permit fees, and sales, use or similar taxes related to the Work; and
- .5 Additional costs of supervision and field office personnel directly attributable to the change.

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

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

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

#### § 7.4 Minor Changes in the Work

The Architect has authority to order minor changes in the Work not involving adjustment in the Contract Sum or extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes will be effected by written order issued through the Construction Manager and shall be binding on the Owner and Contractor.

### ARTICLE 8 TIME

#### § 8.1 Definitions

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

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

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

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

#### § 8.2 Progress and Completion

§ 8.2.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement the Contractor confirms that the Contract Time is a reasonable period for obtaining all supplies, materials, tools and equipment necessary to perform the Work and for properly performing the Work.

§ 8.2.2 The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, prematurely commence operations on the site or elsewhere prior to the effective date of insurance required by Article 11 to be furnished by the Contractor and Owner. The date of commencement of the Work shall not be changed by the effective date of such insurance.

§ 8.2.3 The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time. All work shall be completed in sufficient time to allow for clean-up and preparation for Owner move-in prior to the date of Substantial Completion.

#### § 8.3 Delays and Extensions of Time

§ 8.3.1 Provided the Contractor submits a written request for an extension not more than fourteen days after the occurrence that gives rise to the delay, if the Contractor is delayed at any time in the commencement or progress of the Work by an act or neglect of the Owner, Owner's own forces, Construction Manager, Architect, any of the other

Init.

Multiple Prime Contractors or an employee of any of them, or by changes ordered in the Work, or by fire, unavoidable casualties or other causes beyond the Contractor's control; or by delay authorized by the Owner pending litigation, mediation, or arbitration, as applicable, or by other causes that the Architect, based on the recommendation of the Construction Manager, determines may justify delay, then the Contract Time may be extended by Change Order. Failure of the Contractor to submit a timely request for an extension shall irrevocably waive the Contractor's right to such an extension of time. If the contract time is subject to extension pursuant to this subparagraph, such extension shall be the exclusive remedy of the Contractor and the Contractor shall not be entitled to recover damages from the Owner. Further, minor modifications in Contract time resulting from adjustments in the Project construction schedule shall not be deemed a sufficient cause for an extension of time under this Section.

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

*(Paragraph deleted)*

#### **§ 8.4 Delay Damage Claims**

**§ 8.4.1** If the Contractor fails to complete its Work on time resulting in loss or damages to the Owner, the Owner shall be entitled to recover any damages caused by the Contractor's breach, including overhead, profit, extended general conditions, actual attorneys' fees, etc.,

**§ 8.4.2** In the event the Contractor is delayed or hindered in the commencement or progress of the Work, including but not limited to those delays caused by the Work or lack of Work of another contractor or subcontractor on the Project, and the Contractor claims monetary damages as a direct and proximate consequence thereof (including, but not limited to, extended general conditions, overhead, profit, overtime, interest, supervision or other costs or profits whatsoever), then the Contractor shall not assert such claims against the Architect, Construction Manager or Owner and, as to the Architect, Construction Manager and Owner, the Contractor's claims of such delay damages are hereby waived. The Contractor's sole and exclusive remedy regarding claims for monetary delay damages shall be to pursue such claims directly against any contractor(s) and/or subcontractors on the job which may have caused the delay, and with regard to such claims asserted against the Contractor by any other contractor(s) and/or subcontractors, the Contractor hereby waives the defense of absence of contractual privity and hereby assumes liability to other contractor(s) and/or subcontractors arising out of the Contractor's actions or inactions resulting in such delay and claim.

**§ 8.4.3** For any delay claims raised against the Owner, the Contractor's sole and exclusive remedy is an extension of time to perform the Work not to exceed the time frame of any proven delay. Under no circumstances is the Contractor entitled to monetary delay damages from the Owner.

### **ARTICLE 9 PAYMENTS AND COMPLETION**

#### **§ 9.1 Contract Sum**

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

#### **§ 9.2 Schedule of Values**

Before the first Application for Payment, the Contractor shall submit a schedule of values allocating the entire Contract Sum to the various portions of the Work and prepared in such form and supported by such data to substantiate its accuracy as the Construction Manager and Architect may require. This schedule, unless objected to by the Construction Manager or Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment. In the event there is one Contractor, the Construction Manager shall forward to the Architect the Contractor's schedule of values. If there are Multiple Prime Contractors responsible for performing different portions of the Project, the Construction Manager shall forward the Multiple Prime Contractors' schedules of values only if requested by the Architect.

#### **§ 9.3 Applications for Payment**

**§ 9.3.1** At least fifteen days before the date established for each progress payment, the Contractor shall submit to the Construction Manager an itemized Application for Payment prepared in accordance with the schedule of values, for completed portions of the Work. Such application shall be notarized, if required, and supported by such data substantiating the Contractor's right to payment as the Owner, Construction Manager or Architect may require, such

as copies of requisitions from Subcontractors and material suppliers, and shall reflect retainage if provided for in the Contract Documents.

**§ 9.3.1.1** As provided in Section 7.3.9, such applications may include requests for payment on account of changes in the Work that have been properly authorized by Construction Change Directives, or by interim determinations of the Construction Manager and Architect, but not yet included in Change Orders. A Contractor's request for payment of sums related to work regarding Construction Change Directives shall, unless qualified in writing at the time of request, constitute full and complete consent to the Construction Change Directive(s) and to the issuance of a Change Order.

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

**§ 9.3.1.3** The Contractor shall submit with each monthly Application for Payment (1) an Affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the previous application was submitted and the Owner might in any way be responsible have been paid or otherwise satisfied, and (2) a release or waiver of liens arising out of the Contract from each Contractor and/or Subcontractor, materialman, supplier and laborer or the Contractor addressing all previous Applications for Payment submitted for the Project.

**§ 9.3.2** Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage and transportation to the site for such materials and equipment stored off the site. Payment to Contractor for materials stored off site is discouraged. When circumstances indicate that the Owner's best interest is served by off-site storage, the Contractor shall make written request to the Owner and Construction Manager for approval to include such material costs in its next progress payment. The Contractor's request shall include the following information:

- .1 A list of the fabricated materials consigned to the Project (which shall be clearly identified, giving the place of storage, together with copies of invoices and reasons why materials cannot be delivered to the site.
- .2 Certification that items have been tagged for delivery to the Project and that they will not be used for another purpose.
- .3 A letter from the Contractor's Surety indicating agreement to the arrangements and that payment to the Contractor shall not relieve either party of their responsibility to complete the Work.
- .4 Evidence of adequate insurance covering the material in storage, which shall name the Owner as additionally insured.
- .5 Costs incurred by the Owner, Construction Manager and Architect to inspect material in off-site storage shall be paid by the Contractor.
- .6 Subsequent pay requests shall itemize the materials and their cost which were approved on previous pay requests and remain in off-site storage.
- .7 When a partial payment is allowed on account of material delivered on the site of the Work or in the vicinity thereof or under possession and control of the Contractor, but not yet incorporated therein, such material shall become the property of the Owner, but if such material is stolen, destroyed or damaged by casualty before being used, the Contractor will be required to replace it at its own expense.

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

#### **§ 9.4 Certificates for Payment**

**§ 9.4.1** Where there is only one Contractor, the Construction Manager will, within seven days after the Construction Manager's receipt of the Contractor's Application for Payment, review the Application, certify the amount the

Init.

Construction Manager determines is due the Contractor, and forward the Contractor's Application and Certificate for Payment to the Architect. Within seven days after the Architect receives the Contractor's Application for Payment from the Construction Manager, the Architect will either issue to the Owner a Certificate for Payment, with a copy to the Construction Manager, for such amount as the Architect determines is properly due, or notify the Construction Manager and Owner in writing of the Architect's reasons for withholding certification in whole or in part as provided in Section 9.5.1. The Construction Manager will promptly forward to the Contractor the Architect's notice of withholding certification.

**§ 9.4.2** Where there are Multiple Prime Contractors performing portions of the Project, the Construction Manager will, within seven days after the Construction Manager receives the Multiple Prime Contractors' Applications for Payment: (1) review the Applications and certify the amount the Construction Manager determines is due each of the Multiple Prime Contractors; (2) prepare a Summary of Contractors' Applications for Payment by combining information from each Multiple Prime Contractors' application with information from similar applications for progress payments from other Multiple Prime Contractors; (3) prepare a Project Application and Certificate for Payment; (4) certify the amount the Construction Manager determines is due all Multiple Prime Contractors; and (5) forward the Summary of Contractors' Applications for Payment and Project Application and Certificate for Payment to the Architect.

**§ 9.4.3** Within seven days after the Architect receives the Project Application and Project Certificate for Payment and the Summary of Contractors' Applications for Payment from the Construction Manager, the Architect will either issue to the Owner a Project Certificate for Payment, with a copy to the Construction Manager, for such amount as the Architect determines is properly due, or notify the Construction Manager and Owner in writing of the Architect's reasons for withholding certification in whole or in part as provided in Section 9.5.1. The Construction Manager will promptly forward the Architect's notice of withholding certification to the Contractors. As between the Owner and Contractor, the failure of the Architect or Construction Manager to notify the Contractor or the Owner of a withheld certification does not render such withholding ineffective, and the Owner shall have no obligation to pay a Contractor for uncertified amounts or amounts for which no Certificate for Payment has been issued. If the Contractor does not receive notice of withheld certification, it shall proceed as provided in Section 9.7.

**§ 9.4.4** The Construction Manager's certification of an Application for Payment or, in the case of Multiple Prime Contractors, a Project Application and Certificate for Payment shall be based upon the Construction Manager's evaluation of the Work and the information provided as part of the Application for Payment. The Construction Manager's certification will constitute a representation that, to the best of the Construction Manager's knowledge, information and belief, the Work has progressed to the point indicated and the quality of the Work is in accordance with the Contract Documents. The certification will also constitute a recommendation to the Architect and Owner that the Contractor be paid the amount certified.

**§ 9.4.5** The Architect's issuance of a Certificate for Payment or in the case of Multiple Prime Contractors, Project Application and Certificate for Payment, shall be based upon the Architect's evaluation of the Work, the recommendation of the Construction Manager, and information provided as part of the Application for Payment or Project Application for Payment. The Architect's certification will constitute a representation that, to the best of the Architect's knowledge, information and belief, the Work has progressed to the point indicated, that the quality of the Work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified.

**§ 9.4.6** The representations made pursuant to Sections 9.4.4 and 9.4.5 are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion and to specific qualifications expressed by the Construction Manager or Architect, in writing, together with the Certification to which the qualification pertains.

**§ 9.4.7** The issuance of a separate Certificate for Payment or a Project Certificate for Payment will not be a representation that the Construction Manager or Architect has, unless otherwise required by contract or law, (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work, (2) reviewed the Contractor's construction means, methods, techniques, sequences or procedures, (3) reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by the Owner to substantiate the

Contractor's right to payment or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

#### **§ 9.5 Decisions to Withhold Certification**

**§ 9.5.1** The Construction Manager or Architect may withhold a Certificate for Payment or Project Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Construction Manager's or Architect's opinion the representations to the Owner required by Section 9.4.4 and 9.4.5 cannot be made. If the Construction Manager or Architect is unable to certify payment in the amount of the Application, the Construction Manager will notify the Contractor and Owner as provided in Section 9.4.1 and 9.4.3. If the Contractor, Construction Manager and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment or a Project Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Construction Manager or Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence or subsequent observations, may nullify the whole or a part of a Certificate for Payment or Project Certificate for Payment previously issued, to such extent as may be necessary in the Construction Manager's or Architect's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from the acts and omissions described in Section 3.3.2 because of

- .1 defective Work not remedied, or the Contractor is in breach of the Agreement;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims unless security acceptable to the Owner is provided by the Contractor;
- .3 failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or a separate contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay;
- .7 failure to carry out the Work in accordance with the Contract Documents;
- .8 the Work not having progressed to the extent set forth in the Application for payment; or
- .9 representations of the Contractor are untrue.

**§ 9.5.2** When the above reasons for withholding certification are removed, certification will be made for amounts previously withheld.

**§ 9.5.3** If the Architect or Construction Manager withholds certification for payment under Section 9.5.1, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or material or equipment suppliers to whom the Contractor failed to make payment for Work properly performed or material or equipment suitably delivered. If the Owner makes payments by joint check, the Owner shall notify the Architect and the Construction Manager and both will reflect such payment on the next Certificate for Payment.

**§ 9.5.4** If the Contractor disputes any determination by the Owner, Architect, or Construction Manager with regard to any Certificate for Payment, the Contractor shall nevertheless continue to expeditiously perform the Work and such dispute shall provide no basis for any manner of suspension of the Contractor's performance of the Work.

#### **§ 9.6 Progress Payments**

**§ 9.6.1** After the Architect has issued a Certificate for Payment or Project Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents, and shall so notify the Construction Manager and Architect.

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

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

**§ 9.6.4** The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and material and equipment suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors to ascertain whether they have been properly paid. Neither the Owner, Construction Manager nor Architect shall have an obligation to pay or to see to the payment of money to a Subcontractor except as may otherwise be required by law.

**§ 9.6.5** The Owner may, in its sole discretion, after providing Contractor with ten (10) days prior written notice, make direct payments to the Contractor's Subcontractors, material men, laborers or claimants relating to labor or material provided to the Contractor in the event the Subcontractors, material men, laborers or claimants threaten to or actually cease providing labor and/or materials for the Project due to nonpayment such that, in the Owner's determination, progress of the Project and the Project's schedule are jeopardized. All payments made pursuant to this section shall be considered the same as if paid directly to the Contractor and shall constitute partial payment of the Contract Sum. In the event the Contractor disagrees with the amount proposed to be paid to one or more Subcontractors, material men, laborers or claimants, the Contractor shall provide a bond in the amount the Contractor believes the Owner will overpay, within ten (10) days of receipt of notice, or be barred from making any claim that the amount of the direct payment was incorrect. Payment under this provision shall not jeopardize any other remedy available to the Owner.

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

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

**§ 9.6.8** Subject to applicable law, if a petition in bankruptcy or any other arrangement or proceeding regarding insolvency, assignment for the benefit of creditors, trust, chattel mortgage, or similar state or federal proceeding, whether voluntary or involuntary, shall be filed with respect to the Contractor, the Owner may withhold the final balance, or any other payments, whether or not an application for progress payment has been properly filed, until expiration of the period of any guarantees or warranties required for the Contractor, and the Owner may pay out such funds the amount necessary to satisfy any claims or costs that otherwise would have been covered by such guarantees or warranties.

#### **§ 9.7 Failure of Payment**

If the Construction Manager and Architect do not issue a Certificate for Payment or a Project Certificate for Payment, through no fault of the Contractor and without justifiable basis under the Contract Documents, within fourteen days after the Construction Manager's receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor within seven days after the date established in the Contract Documents the amount certified by the Construction Manager and Architect or awarded by binding dispute resolution unless the Owner, in good faith, disputes the amount certified, then the Contractor may, upon twenty-one (21) additional days' written notice to the Owner, Construction Manager and Architect, stop the Work until: (1) the Contractor receives payment of the amount owing or (2) the Contractor receives notice from the Architect, Construction Manager, or Owner of a full or partial withheld certification as provided herein. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shut-down, delay and start-up, plus interest as provided for in the Contract Documents; Provided, however, that the Owner shall only be obligated to pay the Contractor for the amount certified in a Certificate for Payment and, if the Architect or Construction Manager fail to act on an Application for Payment, the Owner shall have no responsibility to pay the Contractor until such time as the Owner receives a Certificate for Payment from the Architect. Further, the Owner may withhold payment from a non-performing Contractor irrespective of the issuance of a Certificate for Payment as provided elsewhere in the Contract Documents.

## **§ 9.8 Substantial Completion**

**§ 9.8.1** Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents and when all required occupancy permits, if any, have been issued, so the Owner can occupy or utilize the Work for its intended use.

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

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

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

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

**§ 9.8.6** Notwithstanding Sections 9.8.1 and 9.8.2, as a condition precedent to establishing the date of Substantial Completion, the Contractor shall prepare and submit to the Architect and Construction Manager a comprehensive list of items to be completed or corrected (a "punch list"). The Contractor shall respond immediately to correct Work deficiencies and/or punch list items. Should the Contractor fail to make corrections in a timely fashion, but not later than thirty (30) calendar days from the date of Substantial Completion or notification of the required corrections, whichever is earlier, such Work may be corrected by the Owner at the Contractor's sole expense, and the Contract Sum may be adjusted accordingly.

## **§ 9.9 Partial Occupancy or Use**

**§ 9.9.1** The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer as required under Section 11.3.1.5 and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete. The Contractor shall proceed with the work in such a manner as reasonably directed and shall cooperate with the Owner to limit interruptions.

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

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

Init.

### § 9.10 Final Completion and Final Payment

§ 9.10.1 Upon completion of the Work, the Contractor shall forward to the Construction Manager a written notice that the Work is ready for final inspection and acceptance and shall also forward to the Construction Manager a final Contractor's Application for Payment. Upon receipt, the Construction Manager will evaluate the completion of Work of the Contractor and then forward the notice and Application, with the Construction Manager's recommendations, to the Architect who will promptly make such inspection. When the Architect, finds the Work acceptable under the Contract Documents and the Contract fully performed, the Construction Manager and Architect will promptly issue a final Certificate for Payment or Project Certificate for Payment stating that to the best of their knowledge, information and belief, and on the basis of their on-site visits and inspections, the Work has been completed in accordance with terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Certificate is due and payable. The Construction Manager's and Architect's final Certificate for Payment or Project Certificate for Payment will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.

§ 9.10.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect through the Construction Manager (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to the Owner, (3) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment, (5) an affidavit that states the Work is fully completed and performed in accordance with the Contract Documents and is satisfactory to the Architect and the Owner, (6) in the event of Contractor bankruptcy, at the Owner's option, an order entered by the court having jurisdiction of the Contractor's insolvency proceeding authorizing such payment, (7) a general release executed by the Contractor on a form provided by the Construction Manager; (8) all close-out documents and warranties have been provided in a reasonable and acceptable manner, and (9) if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien, including all costs and actual attorneys' fees.

§ 9.10.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Construction Manager and Architect so confirm, the Owner shall, upon application by the Contractor and certification by the Construction Manager and Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect through the Construction Manager prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

§ 9.10.4 The making of final payment shall not constitute a waiver of any Claims by the Owner.

.1 .2 .3

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

§ 9.10.6 All architectural costs incurred after the specified Final Completion date resulting from the Contractor's failure to complete the Work as agreed shall be paid by the Contractor to the Owner prior to the authorization of final payment. Charges to the Contractor shall be made at such times and in such amounts as the Architect invoices the Owner under the current rate schedule in effect at the time of service, for services provided in connection with the Work. The architectural costs incurred after the final completion date will be deducted from the Contractor's progress



payment or final payment as applicable.

## **ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY**

### **§ 10.1 Safety Precautions and Programs**

The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Contract. The Contractor shall submit the Contractor's safety program to the Construction Manager for review and coordination with the safety programs of other Contractors.

The Construction Manager's responsibilities for review and coordination of safety programs shall not extend to direct control over or charge of the acts or omissions of the Contractors, Subcontractors, agents or employees of the Contractors or Subcontractors, or any other persons performing portions of the Work and not directly employed by the Construction Manager.

### **§ 10.2 Safety of Persons and Property**

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

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

**§ 10.2.2** The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations and lawful orders of public authorities bearing on safety of persons or property or their protection from damage, injury or loss. The Contractor shall take all reasonable safety precautions with respect to its Work and the work of others, shall comply with all standard industry safety measures and shall comply with all applicable laws, ordinances, rules, regulations and orders of any public authority and all other requirements of the Contract Documents, including those applicable to the safety of persons or property. The Contractor shall be responsible for the safety of all of the Contractor's employees and the safety of all of the Contractor's Subcontractors, suppliers, and their employees. The Contractor shall report in writing to the Construction Manager any injury to any of Contractor's or its Subcontractors' employees at the site within one (1) day after the occurrence of such injury.

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

**§ 10.2.4** When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel. The Contractor shall be solely and fully responsible for any and all damage claims and for defense of all actions against the Owner relating to such explosives, hazardous materials and/or unusual methods.

**§ 10.2.5** The Contractor shall promptly remedy damage and loss to property referred to in Sections 10.2.1.2, 10.2.1.3 and 10.2.1.4 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2, 10.2.1.3 and 10.2.1.4, except damage or loss attributable to acts or omissions of the Owner, Construction Manager or Architect or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 3.18.

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

Init.

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

**§ 10.2.8 Injury or Damage to Person or Property**

If Contractor suffers injury or damage to person or property because of an act or omission of the Owner, or of others for whose acts the Owner is legally responsible, written notice of such injury or damage, whether or not insured, shall be given to the Owner within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the Owner to investigate the matter. The Contractor's failure to do so shall be an irrevocable waiver of any claim against the Owner arising out of such injury or damage. Injury or damage to persons or property suffered by the Owner because of an act or omission of the Contractor or others for whose acts the Contractor is legally responsible shall be subject to the limitations provisions established by Michigan law.

§ 10.2.8.1 The Contractor causing damage to the Work of another Contractor shall be responsible for the repair and replacement of such damaged Work. Back charges may be made against the Contract sum of the damaging Contractor when corrections are not made promptly.

§ 10.2.8.2 The Owner reserves the right to pay the Contractor suffering damage from monies due the Contractor who is responsible for the Work required by same and shall deduct it from the Contract amount due the said responsible Contractor.

§ 10.2.9 If the Contractor or any Subcontractor chooses to use any systems, equipment, facilities, or services which have been incorporated in the Project as a permanent part thereof by any other, the Contractor shall assume full responsibility for damages caused to said systems, equipment, facilities or services, and have damages repaired as required, so that in no case will the performance of the used systems, equipment, facilities or services be diminished from the specified criteria as a result of such use.

§ 10.2.10 The Contractor acknowledges that the safety of the Owner's students, employees and guests is of the utmost importance. The Contractor will take no action which would jeopardize the safety of the Owner's students, employees and guests and, without the Owner's written approval, shall take no action which would interfere with the Owner's activities. Without limiting the foregoing provisions, the Contractor shall comply with all laws applicable to students and/or school safety.

**§ 10.3 Hazardous Materials**

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

§ 10.3.2 Upon receipt of the Contractor's written notice, the Owner, in its discretion, shall obtain the services of a licensed laboratory to verify a presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall, as a courtesy, furnish in writing to the Contractor, Construction Manager and Architect the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of such material or substance or who are to perform the task of removal or safe containment of such material or substance. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. By Change Order, the Contract Time shall be extended appropriately to address shut-down, delay and start-up.

**§ 10.3.3**

§ 10.3.4 The Owner shall not be responsible under this Section 10.3 for materials or substances the Contractor brings to the site. To the extent the Contract requires the removal, transport and disposal of hazardous materials, the Contractor agrees that it assumes responsibility for said tasks as a part of the Agreement.

Init.

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

#### § 10.3.6

#### § 10.4 Emergencies

In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's reasonable discretion, to prevent threatened damage, injury or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7. Nothing in this section will be construed as relieving Contractor from the cost and responsibilities for emergencies covered hereby.

#### § 10.5 Notification of Utility Companies

§ 10.5.1 At least five (5) working days prior to the start of work in areas which may involve existing utility lines, the Contractor shall notify the MISS DIG notification system of the planned work (and, if applicable, any other Registered Utility Protection Service of the utility company possibly affected by the planned work).

§ 10.5.2 The utility company should, upon receipt of notice, stake, mark or otherwise designate the location (and depth) of their lines, or temporarily move the line(s).

§ 10.5.3 The Contractor shall immediately report to the respective utility company any break or leak in its lines, or any dent, gouge, groove or other damage to the utility line or to its coating or cathodic protection made or discovered in the course of the Work.

§ 10.5.4 The Contractor shall immediately alert the Owner, Construction Manager, Architect and occupants of nearby premises of any and all emergencies caused or discovered in the utility line(s) in the course of the Work.

### ARTICLE 11 INSURANCE AND BONDS

#### § 11.1 Contractor's Liability Insurance

§ 11.1.1 The Contractor shall purchase from and maintain in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located such insurance as will protect the Contractor from claims set forth below which may arise out of or result from the Contractor's operations and completed operations under the Contract and for which the Contractor may be legally liable, whether such operations be by the Contractor or by a Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

- .1 Claims under workers' compensation, disability benefit and other similar employee benefit acts which are applicable to the Work to be performed;
- .2 Claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employees;
- .3 Claims for damages because of bodily injury, sickness or disease, or death of any person other than the Contractor's employees;
- .4 Claims for damages insured by usual personal injury liability coverage;
- .5 Claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom;
- .6 Claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance or use of a motor vehicle; and
- .7 Claims for bodily injury or property damage arising out of completed operations; and
- .8 Claims involving contractual liability insurance applicable to the Contractor's obligations under Section 3.18.
- .9 liability insurance shall include all major divisions of coverage and be on a comprehensive basis including:
  - .1 Premises' Operations (deleting X, C, or U exclusions);
  - .2 Owner's and Contractor's Protective;
  - .3 Products and Completed Operations;
  - .4 Contractual – including specific for the Contractor's obligations under Paragraph 3.18;
  - .5 Any auto;

Init.

- .6 Broad Form Property Damage, including Completed Operations; and  
.10 All bonds required by law, including bid bond, performance bond and payment bond.

§ 11.1.2 The insurance required by Section 11.1.1 shall be written for not less than limits of liability specified in the Contract Documents, as required by law, or as reasonably required by the Owner in light of the nature of services performed and insurance obligations of its other contractors and consultants, whichever coverage is greater. Coverages, whether written on an occurrence or claims-made basis, shall be maintained without interruption from the date of commencement of the Work until the date of final payment and termination of any coverage required to be maintained after final payment and, with respect to the Contractor's completed operations coverage, until the expiration of the period for correction of Work or for such other period for maintenance of completed operations coverage as specified in the Contract Documents.

§ 11.1.3 Certificates of insurance acceptable to the Owner shall be submitted by Contractor to the Construction Manager for transmittal to the Owner with a copy to the Architect prior to commencement of the Work and thereafter upon renewal or replacement of each required policy of insurance. These certificates and the insurance policies required by this Section 11.1 shall contain a provision that coverages afforded under the policies will not be canceled, reduced, or allowed to expire until at least 30 days' prior written notice has been given to the Owner. An additional certificate evidencing continuation of liability coverage, including coverage for completed operations, shall be submitted with the final Application for Payment as required by Section 9.10.2 and thereafter upon renewal or replacement of such coverage until the expiration of the time required by Section 11.1.2. Information concerning reduction of coverage shall be furnished by the Contractor with reasonable promptness, but no less than 30 days prior to any reduction in coverage.

§ 11.1.4 The Contractor shall cause the commercial liability coverage required by the Contract Documents to include (1) the Construction Manager, the Construction Manager's consultants, the Owner, the Architect, and the Architect's consultants as additional insureds for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's operations; and (2) the Owner as an additional insured for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's completed operations.

§ 11.1.5 On all insurance contracts under which the Contractor is obligated to have its insurance company name the Owner as additional insured, the Contractor shall require such insurance company to add to the policy the following clause: "The insurance afforded to the Additional Insured is primary insurance. If the Additional Insureds have other insurance which is applicable to the loss on an excess or contingent basis, the amount of the insurance company's liability under this policy shall not be reduced by the existence of such other insurance."

#### § 11.2 Owner's Liability Insurance

The Owner shall be responsible for purchasing and maintaining the Owner's usual liability insurance.

#### § 11.3 Property Insurance

§ 11.3.1 Unless otherwise provided, the Owner shall purchase and maintain, in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located, property insurance written on a builder's risk "all risk" or equivalent policy form in the amount of the initial Contract Sum, plus value of the subsequent Contract modifications and cost of materials supplied or installed by others, comprising total value for the entire Project at the site on a replacement cost basis without optional deductibles. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made as provided in Section 9.10 or until no person or entity other than the Owner has an insurable interest in the property required by this Section 11.3 to be covered, whichever is later. This insurance shall include interests of the Owner, the Contractor, Subcontractors and Sub-subcontractors in the Project. The term "temporary building", as used in this section, shall not include job trailers of any party.

§ 11.3.1.1 Property insurance shall be on an "all-risk" or equivalent policy form and shall include, without limitation, insurance against the perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood, windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for the Architect's, Contractor's, and Construction Manager's services and expenses required as a result of such insured loss.

§ 11.3.1.2 If the Owner does not intend to purchase such property insurance required by the Contract and with all of the coverages in the amount described above, the Owner shall so inform the Contractor in writing prior to commencement of the Work. The Contractor may then effect insurance that will protect the interests of the Contractor, Subcontractors and Sub-subcontractors in the Work, and by appropriate Change Order the cost thereof shall be charged to the Owner. If the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain insurance as described above, without so notifying the Contractor in writing, then the Owner shall bear all reasonable costs properly attributable thereto.

§ 11.3.1.3 If the property insurance requires deductibles and such deductibles are identified in the Contract Documents, the Contractor shall pay costs not covered because of such deductibles.

§ 11.3.1.4 This property insurance shall cover portions of the Work stored off the site, and also portions of the Work in transit.

§ 11.3.1.5 Partial occupancy or use in accordance with Section 9.9 shall not commence until the insurance company or companies providing property insurance have consented to such partial occupancy or use by endorsement or otherwise. The Owner and the Contractor shall take reasonable steps to obtain consent of the insurance company or companies and shall, without mutual written consent, take no action with respect to partial occupancy or use that would cause cancellation, lapse or reduction of insurance.

§ 11.3.1.6 The Contractor shall at the Contractor's own expense provide insurance coverage for materials stored off the site after written approval of the Owner at the value established in the approval, and also for portions of the Work in transit until such materials are permanently attached to the work.

§ 11.3.1.7 The insurance required by Section 11.3 is not intended to cover machinery, tools or equipment owned or rented by the Contractor that are utilized in the performance of the Work, but not incorporated into permanent improvements. The Contractor shall, at the Contractor's own expense, provide insurance for owned or rented machinery, tools or equipment.

§ 11.3.2 **Boiler and Machinery Insurance.** The Owner shall purchase and maintain boiler and machinery insurance required by the Contract Documents or by law, which shall specifically cover such insured objects during installation and until final acceptance by the Owner; this insurance shall include interests of the Owner, Construction Manager, Contractor, Subcontractors and Sub-subcontractors in the Work, and the Owner and Contractor shall be named insureds.

§ 11.3.3 **Loss of Use Insurance.** The Owner, at the Owner's option, may purchase and maintain such insurance as will insure the Owner against loss of use of the Owner's property due to fire or other hazards, however caused.

§ 11.3.4 If the Contractor requests in writing that insurance for risks other than those described herein or other special causes of loss be included in the property insurance policy, the Owner shall, if possible, include such insurance, and the cost thereof shall be charged to the Contractor by appropriate Change Order.

§ 11.3.5

§ 11.3.6 The Owner shall file with the Contractor a copy of each policy that includes insurance coverages required by this Section 11.3. Each policy shall contain all generally applicable conditions, definitions, exclusions and endorsements related to this Project. Each policy shall contain a provision that the policy will not be canceled or allowed to expire, and that its limits will not be reduced, until at least 30 days' prior written notice has been given to the Contractor.

§ 11.3.7 **Waivers of Subrogation.** The Owner is not waiving any rights its insurer(s) may have to subrogation. To the extent any terms in the General Conditions or any other Contract Document are contrary to the aforementioned, such terms shall be deemed void and unenforceable.

§ 11.3.8 A loss insured under the Owner's property insurance shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 11.3.10. The Contractor shall pay Subcontractors their just shares of insurance proceeds received by the Contractor, and by appropriate agreements, written where legally required for validity, shall require Subcontractors to make payments to their Sub-subcontractors in similar manner.

#### § 11.3.9

§ 11.3.10 The Owner shall use its best efforts, with consultation of the Construction Manager, to reach a quick and fair settlement for all interested parties, with the insurance companies after a loss.

### § 11.4 Performance Bond and Payment Bond

§ 11.4.1 The Contractor shall furnish bonds covering faithful performance of 100% of the Contract and payment of 100% of the obligations arising thereunder as stipulated in bidding requirements or specifically required in the Contract Documents or by law on the date of execution of the Contract. The bonds shall be provided by a surety that is reasonably acceptable to the Owner.

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

§ 11.4.3 The Construction Manager shall obtain copies of the Performance Bond and Payment Bond required by the Agreement from the Contractor prior to Contractor beginning performance pursuant to the Agreement. The Contractor's obligation to provide such bonds shall not be waived in any fashion, including any failure to secure such bonds prior to the Contractor beginning performance pursuant to the Agreement.

## ARTICLE 12 UNCOVERING AND CORRECTION OF WORK

### § 12.1 Uncovering of Work

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

§ 12.1.2 If a portion of the Work has been covered which the Construction Manager or Architect has not specifically requested to observe prior to its being covered, the Construction Manager or Architect may request, with the Owner's consent, to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, costs of uncovering and replacement shall, by appropriate Change Order, be at the Owner's expense. At the time Owner's consent is sought as described herein, the Architect and/or Construction Manager shall notify the Owner that additional costs may apply if the Work is in accordance with the Contract Documents. If such Work is not in accordance with the Contract Documents, such costs and the cost of correction shall be at the Contractor's expense unless the condition was caused by the Owner or one of the other Contractors in which event the Owner or the separate Contractor, shall be responsible for payment of such costs.

### § 12.2 Correction of Work

#### § 12.2.1 Before or After Substantial Completion

The Contractor shall promptly correct Work rejected by the Construction Manager or Architect or failing to conform to the requirements of the Contract Documents, whether discovered before or after Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Construction Manager's and Architect's services and expenses made necessary thereby, shall be at the Contractor's expense. If any portion of the Work is determined by the Owner, Construction Manager or Architect, either during performance of the Work or during any applicable warranty period, to be defective or not in compliance with the contract requirements, the Construction Manager or Owner shall notify the Contractor in writing that such Work is rejected. Thereupon, the Contractor shall immediately replace and/or correct such Work by making the same comply strictly with all the requirements therefor. The Contractor shall bear all costs of correcting such rejected Work, including work of other Subcontractors and including compensation for the Architect's and Construction Manager's additional services and any delay or related damage to the Owner made necessary thereby. The Construction Manager shall have the right to

Init.

charge the Contractor for any compensation payable for the Architect's or Construction Manager's additional services required by the Contractor's rejected Work and deduct the payment from the next payment due the Contractor.

#### **§ 12.2.2 After Substantial Completion**

**§ 12.2.2.1** In addition to the Contractor's obligations under Section 3.5, if, within one year after the date of Substantial Completion of the Work or designated portion thereof, or after the date for commencement of warranties established under Section 9.9.1, or by terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the Owner or Construction Manager to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner or Construction Manager shall give such notice promptly after discovery of the condition. During that "correction period," if the Contractor fails to correct nonconforming Work within a reasonable time after receipt of notice from the Owner, Construction Manager, or Architect, the Owner may correct it in accordance with Section 2.4.

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

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

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

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

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

**§ 12.2.6** The Contractor shall respond immediately to correct Work deficiencies and/or punch list items. Failure to correct Work deficiencies and/or punch list items in a timely fashion shall be a material breach, and the Owner may terminate the Contract immediately without following the procedure identified in Section 14.2. As used in this Section 12.2.6, "timely" means the Contractor shall begin correction within three days of receiving the punch list or notice of work deficiency, and correction will be completed in a commercially reasonable time in accordance with the direction of the Construction Manager. Whether or not the Contract is terminated, if the Contractor fails to make corrections in a timely fashion, such Work may be corrected by the Owner, in its sole discretion, at the Contractor's expense and the Contract Sum may be adjusted by backcharge accordingly. The Contractor shall promptly notify the Construction Manager, in writing, when the Work deficiencies and/or punch list items are completed. Upon the review of the Work by the Construction Manager after such notification by the Contractor, if Work deficiencies and/or punch list items shall continue to exist, the Contractor shall reimburse any cost incurred by the Owner, including the Construction Manager's and Architect's fees for reinspections of the Work. Failure to pay such costs within ten (10) days of receipt of a demand regarding the same shall permit the Owner to withhold such amounts from the Contractor's contract.

#### **§ 12.3 Acceptance of Nonconforming Work**

If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made. The acceptance of nonconforming Work by the Owner shall be by written Change Order, specifically referencing that it addresses nonconforming work, acceptable to the Owner's authorized representative, and signed by all parties. Acceptance of nonconforming Work may only occur pursuant to such written Change Order.

Init.

## ARTICLE 13 MISCELLANEOUS PROVISIONS

### § 13.1 Governing Law

The Contract shall be governed by the law of the State of Michigan in all respects, except that claims and causes of action brought by the Owner shall not be deemed untimely if filed within six (6) years of substantial completion of the entire (and all) Project(s).

### § 13.2 Successors and Assigns

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

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

### § 13.3 Written Notice

Written notice shall be deemed to have been duly served if delivered in person to the individual, to a member of the firm or entity or to an officer of the corporation for which it was intended; or if delivered at or sent by registered or certified mail or by national overnight courier service providing a tracking system and proof of delivery to, the last business address known to the party giving notice. Any written notice delivered with a written acknowledgement of receipt shall be deemed duly served, regardless of method.

Wherever the Contract Documents require the Contractor to give "Notice" or "Timely Notice" to the Architect, Public Authority, and/or others, it shall be the Contractor's responsibility to furnish all such notices sufficiently in advance to allow the party receiving the notice reasonable time to react to such notice, including travel time on the job site as necessary, when such notices require the on-site presence of the Architect, Public Authority, their authorized representatives, or others for field observation of inspections, testing or approvals. Reasonable time shall be defined as no less than 24 hours plus normal travel time from the home office of the party being notified to the job site and must also accommodate known, standard, or reasonable processing periods.

### § 13.4 Rights and Remedies

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

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

### § 13.5 Tests and Inspections

§ 13.5.1 Tests, inspections and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules and regulations or lawful orders of public authorities. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections and approvals. The Contractor shall give the Construction Manager and Architect timely notice of when and where tests and inspections are to be made so that the Construction Manager and Architect may be present for such procedures. The Owner shall bear costs of (1) tests, inspections or approvals that do not become requirements until after bids are received or negotiations concluded, and (2) tests, inspections or approvals where building codes or applicable laws or regulations prohibit the Owner from delegating their cost to the Contractor.

§ 13.5.2 If the Construction Manager, Architect, Owner or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection or approval not included under Section 13.5.1, the Construction Manager and Architect will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection or approval by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Construction Manager and Architect of when and where tests and inspections



are to be made so that the Construction Manager and Architect may be present for such procedures. Such costs except as provided in Section 13.5.3, shall be at the Owner's expense.

**§ 13.5.3** If such procedures for testing, inspection or approval under Sections 13.5.1 and 13.5.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents or applicable law, all costs made necessary by such failure including those of repeated procedures and compensation for the Construction Manager's and Architect's services and expenses shall be at the Contractor's expense.

**§ 13.5.4** Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Construction Manager for transmittal to the Architect.

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

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

#### **§ 13.6 Interest**

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

#### **§ 13.7 Time Limits on Claims**

The Owner shall commence all claims and causes of action in accordance with Section 13.1 and Section 13.7.2, regardless of any other time frames identified in this Agreement. The Contractor shall commence all claims and causes of action in accordance with Section 15.1, other provisions of this Agreement and in accordance with Michigan law.

**§ 13.7.2** Regardless of any provisions to the contrary, the statute of limitations with respect to any defective or nonconforming Work which is not discovered by the Owner shall not commence until the discovery of such defective or nonconforming Work by the Owner. See also Section 13.1.

#### **§ 13.8 SURETY NOTICE AND PRIOR APPROVAL**

Except where otherwise expressly required by the terms of the Agreement, the Contract Documents or the General Conditions, exercise by the Owner of any contractual or legal right or remedy without prior notice to or approval by the Contractor's surety shall in no way bar or prohibit the Owner's ability to pursue such right or remedy. Further, pursuit of such a right or remedy without prior notice to or approval of surety shall in no way compromise, limit or bar any claim by the Owner against a surety bond of the Contractor. The Owner's claims against a Contractor's surety bond shall be governed by Section 13.1 with respect to any limitations periods.

**§ 13.9** The Contractor agrees that time is of the essence and to start work when directed by the Construction Manager and to furnish sufficient materials and a sufficient number of properly skilled workers, so as not to delay the work of any other Contractor or completion of the Project.

**§ 13.10** Notwithstanding any provisions within the Contract Documents, nothing shall be deemed a waiver of any immunity granted to Owner by law or statute, including but not necessarily limited to, governmental immunity under MCL 691.1407.

**§ 13.11** The Owner, being a governmental unit, is protected by the Michigan Void Construction Contracts Act, MCL 691.991.

### **ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT**

#### **§ 14.1 Termination by the Contractor**

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

Init.

persons or entities performing portions of the Work under direct or indirect contract with the Contractor, for any of the following reasons:

- .1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped;
- .2 An act of government, such as a declaration of national emergency that requires all Work to be stopped;
- .3 Because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents subject to justifiable withholding of payment as described herein or in the Contract Documents; or
- .4 The Owner has failed to furnish to the Contractor promptly, upon the Contractor's request, reasonable evidence as required by Section 2.2.1.

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

§ 14.1.3 If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days' written notice to the Owner, Construction Manager and Architect, terminate the Contract and recover from the Owner payment for Work executed including reasonable overhead and direct costs incurred by reason of such termination.

§ 14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor or a Subcontractor or their agents or employees or any other persons performing portions of the Work under contract with the Contractor because the Owner has repeatedly failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days' written notice to the Owner, Construction Manager and Architect, terminate the Contract and recover from the Owner as provided in Section 14.1.3. The Contractor may not terminate the Contract unless it has submitted claims for the delays and sought an extension of time for each delay.

#### § 14.2 Termination by the Owner for Cause

§ 14.2.1 The Owner may terminate the Contract if the Contractor

- .1 refuses or fails to supply enough properly skilled workers or proper materials to the point of negatively impacting the Project and/or the related schedule;
- .2 fails to make payment to Subcontractors for materials or labor in accordance with the respective agreements between the Contractor and the Subcontractors;
- .3 disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority;
- .4 otherwise is guilty of substantial breach of a provision of the Contract Documents; or
- .5 the Contractor fails to prosecute the Work or any part thereof with promptness and diligence or fails to perform any provisions of this Contract, or goes into bankruptcy, liquidation, makes an assignment for the benefit of creditors, enters into a composition with its creditors, or becomes insolvent.

§ 14.2.2 When any of the above reasons exist, the Owner, after consultation with the Construction Manager, and upon certification by the Initial Decision Maker that sufficient cause exists to justify such action, may without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, three days' written notice, terminate the Contractor's right to proceed with the Work, or such part of the Work as to which such defaults have occurred, and may take any one or more of the following actions:

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

The notice required by this Section 14.2.2 shall not give the Contractor a right to cure defective Work or to cure other grounds for termination under Section 14.2.1. Further, the Owner's failure to strictly comply with the formal

Init.

requirements of termination (e.g., by providing less than three days' notice of termination) shall not be substantial breach by the Owner.

In the event the Contractor's surety bond requires notice of intent to declare a default of the Contractor and if such bond notice is provided by the Owner, such notice shall be adequate to satisfy the three (3) day written notice described above in this section.

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

§ 14.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Construction Manager's and Architect's services and expenses made necessary thereby, and other damages incurred by the Owner in pursuing termination and completion of the Work, including actual attorney and legal fees and costs, and not expressly waived, such excess shall be paid to the Contractor. If such costs and damages exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The amount to be paid to the Contractor or Owner, as the case may be, shall, upon application, be certified by the Initial Decision Maker after consultation with the Construction Manager, and this obligation for payment shall survive termination of the Contract.

#### § 14.3 Suspension by the Owner for Convenience

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

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

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

#### § 14.4 Termination by the Owner for Convenience

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

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

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

§ 14.4.3 In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment for Work executed, and costs incurred by reason of such termination.

### ARTICLE 15 CLAIMS AND DISPUTES

#### § 15.1 Claims

§ 15.1.1 Definition. A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, or other relief with respect to the terms of the Contract, including but not limited to additional sums, additional time for performance, or damages for delay. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim. The Contractor shall not knowingly (as "knowingly" is defined in the Federal False Claims Act, 31 USC 3729, *et seq.*) present or cause to be presented a false or fraudulent Claim. As a condition precedent to making a Claim by the Contractor, the Claim shall be accompanied by an affidavit sworn to before a notary public or other person authorized to administer oaths in the State of Michigan and executed by an authorized representative of the Contractor, which states that: "The Claim which is submitted herewith complies with subparagraph 15.1.1 of the General Conditions, as amended, which provides that the Contractor shall not knowingly present or cause to be presented a false or fraudulent claim." Claims of the Owner shall be governed by the relevant Michigan statutory limitations period.

Init.

**§ 15.1.2 Notice of Claims.** Claims by the Contractor must be initiated by written notice to the Owner and to the Initial Decision Maker with a copy sent to the Construction Manager and Architect, if the Construction Manager and or Architect is not serving as the Initial Decision Maker. Claims by the Contractor must be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the Contractor first recognizes the condition giving rise to the Claim, whichever is later. Failure to timely and properly initiate a claim shall be an irrevocable waiver of such claim. Claims by the Owner shall be governed by the applicable statute of limitations period, except as such time frame may be longer in accordance with Section 13.1 and Section 13.7.

**§ 15.1.3 Continuing Contract Performance.** Pending final resolution of a Claim, including mediation and/or litigation, as applicable, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make undisputed payments in accordance with the Contract Documents. The Construction Manager will prepare Change Orders and the Architect will issue a Certificate for Payment or Project Certificate for Payment in accordance with the decisions of the Initial Decision Maker.

**§ 15.1.4 Claims for Additional Cost.** If the Contractor wishes to make a Claim for an increase in the Contract Sum, written notice as provided herein shall be given before proceeding to execute the Work. Failure to provide such notice shall serve as an absolute bar against a claim for such an increase in the Contract Sum. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.3. A Project delay shall not be a basis for a Claim for additional cost. Delays claims against the Owner may be remedied only through an extension of time per Section 8.4.2.

**§ 15.1.5 Claims for Additional Time**

**§ 15.1.5.1** If the Contractor wishes to make a Claim for an increase in the Contract Time, additional written notice as provided herein shall be given in addition to the general requirements for filing a claim. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work, due to the increase in Contract Time sought. In the case of a continuing delay only one Claim is necessary.

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

**§ 15.1.6 Claims for Consequential Damages.** The Contractor waives Claims against the Owner for consequential damages arising out of or relating to this Contract. This waiver includes

- .1 damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the Work.

Nothing contained in this Section 15.1.6 shall be deemed to preclude an award of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.

**§ 15.2 Initial Decision**

**§ 15.2.1** Claims, excluding those arising under Sections 10.3, 10.4, 11.3.9, and 11.3.10, shall be referred to the Initial Decision Maker for initial interpretation. The Architect will serve as the Initial Decision Maker. Except for those Claims excluded by this Section 15.2.1, an initial interpretation shall be required as a condition precedent to mediation or litigation of any Claim brought by the Contractor against the Owner arising prior to the date final payment is due, unless 30 days have passed after the Claim has been referred to the Initial Decision Maker with no interpretation having been rendered. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

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

Within ten (10) days of a written request, the Contractor shall make available to the Owner or its representative all of its books, records, or other documents in its possession or to which it has access relating to a Claim and shall require its subcontractors, regardless of tier, and materialmen to do the same.

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

**§ 15.2.4** If the Initial Decision Maker requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of such request, and shall either (1) provide a response on the requested supporting data, (2) advise the Initial Decision Maker when the response or supporting data will be furnished or (3) advise the Initial Decision Maker that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Initial Decision Maker will, based on its interpretation, either reject or approve the Claim in whole or in part.

**§ 15.2.5** The Initial Decision Maker will render an initial interpretation approving or rejecting the Claim, or indicating that the Initial Decision Maker is unable to resolve the Claim. This initial interpretation shall (1) be in writing; (2) state the reasons therefor; and (3) notify the parties and the Architect and Construction Manager, if the Architect or Construction Manager is not serving as the Initial Decision Maker, of any change in the Contract Sum or Contract Time or both. The initial decision shall be subject to the parties' agreed upon dispute resolution process.

**§ 15.2.6** Regardless of any other time frames identified herein, claims and causes of action brought by the Owner shall be governed in accordance with the statute of limitations periods under Michigan law, except for such longer periods of time as may be permitted in Section 13.1 and Section 13.7.

**§ 15.2.6.1**

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

**§ 15.2.8**

**§ 15.3 Mediation**

**§ 15.3.1** Except as stated in this Agreement or otherwise agreed in writing by the parties, claims, disputes, or other matters in controversy arising out of or related to the Contract except those waived as provided for in Sections 9.10.4, 9.10.5, and 15.1.6 shall be subject to mediation.

**§ 15.3.2** The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of the Agreement. A request for mediation shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the mediation. The request may be made concurrently with the commencement of the parties' agreed upon dispute resolution proceedings but, in such event, mediation shall proceed in advance of such proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order.

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

*(Paragraphs deleted)*

**§ 15.4.4 Consolidation or Joinder**

*(Paragraphs deleted)*

Init.

§ 15.4.4.1 The Owner, at its sole discretion, may consolidate an arbitration and/or a mediation conducted under this Agreement with any other arbitration and/or mediation to which it is a party provided that (1) the arbitration and/or mediation agreement governing the other arbitration and/or mediation, as applicable, permits consolidation, (2) the arbitrations and/or mediations to be consolidated substantially involve common questions of law or fact, and (3) the arbitrations and/or mediations employ materially similar procedural rules and methods for selecting arbitrator(s) and/or mediator(s).

§ 15.4.4.2 The Owner, at its sole discretion, may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration and/or mediation, as applicable, provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration and/or mediation, as applicable, involving an additional person or entity shall not constitute consent to arbitration and/or mediation of any claim, dispute or other matter in question not described in the written consent.

§ 15.4.4.3

Modified: 08/03/18; 10:37am

**PART 1 – GENERAL**

**1.01 DESCRIPTION**

- A. Addenda are written or graphic instruments issued prior to execution of construction contracts which add to, delete from, clarify, or correct the Bidding Documents and/or the Contract Documents.
- B. Addenda may be included in the Bidding Documents and may be included in the Contract Documents.
- C. Addenda may be issued by either the Architect or the Construction Manager as deemed necessary to facilitate the building and construction of the Project.

**1.01 BIDDERS' AND CONTRACTORS' RESPONSIBILITIES**

- A. Each Bidder shall be responsible for taking the provisions of all Addenda issued prior to the Bid Date into account during the presentation of his Proposal.
- B. Each Bidder shall be responsible for obtaining all Addenda, and for ascertaining that all Addenda issued prior to the Bid Date have been considered in preparing his Proposal.
- C. Each Contractor shall perform his work in accordance with all Addendums issued.

**END OF SECTION 00900**

# **MILESTONE SCHEDULE ON FOLLOWING PAGE(S)**

**END OF SECTION 00999**



# Eastern High School at Handy M.S. Milestone Schedule



ID	% Complete	Task Name	Duration	Start	Finish	March	April	May	June	July	August
1	0%	<b>Milestone Schedule</b>	<b>115 days</b>	<b>Mon 3/11/24</b>	<b>Fri 8/16/24</b>	2/25, 3/3, 3/10, 3/17, 3/24, 3/31, 4/7	4/14, 4/21, 4/28, 5/5, 5/12, 5/19, 5/26, 6/2, 6/9, 6/16, 6/23, 6/30, 7/7, 7/14, 7/21, 7/28, 8/4, 8/11, 8/18, 8/25				
2	0%	Award Contracts	1 day	Mon 3/11/24	Mon 3/11/24						
3	0%	Contracts	10 days	Tue 3/12/24	Mon 3/25/24						
4	0%	Shop Drawings / Submittals	10 days	Tue 3/26/24	Mon 4/8/24						
5	0%	Procurement	44 days	Tue 4/9/24	Fri 6/7/24						
6	0%	Renovations	48 days	Mon 6/10/24	Wed 8/14/24						
7	0%	Inspections	1 day	Thu 8/15/24	Thu 8/15/24						
8	0%	Turn Over	1 day	Fri 8/16/24	Fri 8/16/24						

Task	External Milestone	Duration-only	External Milestone
Split	Inactive Task	Manual Summary Rollup	Progress
Milestone	Inactive Milestone	Manual Summary	Deadline
Summary	Inactive Milestone	Start-only	
Project Summary	Inactive Summary	Finish-only	
External Tasks	Manual Task	External Tasks	

**Wolgast Corporation reserves the right to make changes to this construction schedule as the project progress warrants.**

**PART 1 – GENERAL**

**1.01 PROJECT DESCRIPTION**

**A. Bay City Public Schools – 2024 Sinking Fund Bid Pack 11 Eastern HS at Handy MS**

**1.02 CONTRACTORS USE OF PREMISES**

- A. Contractors shall limit their use of the Project site for Work and for storage, to allow for:
1. Work by other Contractors.
- B. Contractors shall coordinate their use of the Project site under the direction of the Construction Manager.
- C. Contractors shall assume full responsibility for the protection and safekeeping of materials and equipment stored on the site. No security will be employed.
- D. Each Contractor shall move any stored material or equipment under their control if it interferes with the operations of the Owner or other Contractors, as directed by the Construction Manager.
- E. Contractors shall obtain and pay for additional storage or work areas needed for operations not allowed on the site.

**1.03 OWNER OCCUPANCY**

- A. The owner intends to occupy the Project by **Refer to Milestone Schedule**. All contractors must comply with this requirement.

**1.04 OWNER FURNISHED PRODUCTS**

- A. Products furnished and paid for by the Owner are described in the Specifications and in the Bid Division List (Section 00309).
- B. Owner's Responsibilities Regarding Owner-Furnished Products:
1. Arrange for and deliver necessary shop drawings, product data and samples to the installing contractor,
  2. Arrange and pay for product delivery to the site, in concert with the Short-Term Construction Activities Plan,
  3. Arrange for the suppliers to submit bills of materials to Contractors,
  4. Inspect deliveries jointly with Contractors,
  5. Submit claims for transportation damage,
  6. Arrange for replacement of damaged, defective, or missing items,
  7. Arrange for manufacturer's warranties, bonds, service, and inspections, as required.

- C. Contractor's Responsibilities Regarding Owner-Furnished Products:
1. Designate needed delivery dates for each product in the Short-Term Construction Activities Plan,
  2. Review shop drawings, product data and samples,
  3. Review and return Owner-Furnished shop drawings, data, and samples with notification of any discrepancies or problems anticipated in use of the product, within 2 weeks,
  4. Promptly inspect products jointly with the Owner, and record shortages, damaged items, and defective items,
  5. Handle products at the site, including uncrating and storage,
  6. Protect products from exposure to elements, and other forms of damage,
  7. Assemble, install, connect, adjust, and finish products as stipulated in the Specification,
  8. Repair or replace items damaged by Contractor,
  9. Dispose of all crating, wrapping, and trash related to the material.

**END OF SECTION 01010**

**PART 1 – GENERAL**

**1.01 NORMAL WORK HOURS**

A. 7 a.m. to 5 p.m., Monday through Friday.

**1.02 EXCEPTIONS**

- A. Necessary variations of normal work hours shall only occur with the express approval of the Construction Manager on the Owner's behalf.
- B. As a condition to the contract, the Contractor agrees that no premium-time, over-time or other special rate shall be charged for the scheduled completion of the project for any reason or cause.
- C. It will be the responsibility of each Contractor to provide an adequate work force to assure the timely completion of all Work.
- D. The Contractor will work whatever hours required (overtime, weekends, holidays) to complete their work and allow for the completion of all other work to achieve final completion in the time frames required by the Owner.

**END OF SECTION 01030**

**PART 1 – GENERAL**

**1.01 CONSTRUCTION MANAGEMENT**

- A. This is a Construction Management project. There is no General Contractor. All Contractors on this Project are Prime Contractors. The Owner will award contracts for all Bid Divisions involved in the Project. The Project will be controlled and administered by a Construction Manager.

**1.02 WORK ASSIGNMENTS**

- A. Nothing contained on the Contract Documents, and especially in the work scope of any Bid Division, shall be construed as a Work assignment to any construction trade industry. Each Contractor is responsible for their own decisions on Work assignments and shall make them in accord with the prevailing practice in the areas of the Project, and in such a way that neither their progress nor the progress of others will be adversely affected.
- B. Disputes that may arise over improper assignments or over assignments claimed by more than one Contractor shall be settled immediately by the Contractors and shall in no case result in a slowdown or stoppage of Work of any Contractor.

**1.03 RETAINAGE ON OWNER PURCHASED ITEMS**

- A. The Owner may retain an amount of Five Thousand (\$5,000.00) or ten percent (10%); whichever is the larger amount, on material and/or equipment purchased from suppliers for inclusion in the Work, until such time as it is satisfactorily installed. The purpose of this provision is to ensure proper conformance to the Contract Documents.

**1.04 PERFORMANCE OF WORK**

- A. All Contractors shall provide weekly input to aid in the preparation of the Look Ahead Schedule by which the Project will be built. Consequently, it is the responsibility and obligation of each Contractor to utilize their manpower and resources according to the commitments made under the Look Ahead Schedule.

**1.05 PROMPTNESS OF EXECUTION**

- A. It is the intention of the Owner to complete the Project in the fastest practical time frame. Whereas varying conditions inherent in the construction process will affect the progress of the Work, it is the intent of each construction contract that the Contractor maintain the progress pace set forth in the CAP schedule.

**1.06 PROGRESS PAYMENTS**

- A. It is the intention of the Owner to recognize timely performance prescribed in the CAP. Contractors who maintain specified progress will be eligible for 100% Progress Payments.
- B. Contractors who fail to maintain specified progress may be subject to retainage up to 100% of Progress Payments, at such times as those Contractors are judged by the Construction Manager, and/or the Project Architect, to be behind schedule.

**1.07 PAYMENT FOR STORED MATERIALS**

- A. As a means of eliminating cost escalation on available items of material and equipment, and in the interest of obtaining competitive Bids, the Owner will provide payment for contract items purchased early and stored on site, and in specific pre-approved instances, off the Project site as well. To qualify for such payment, the material or equipment must be safely stored, protected, and insured against loss or damage, inspected and dedicated to this Project only. Any extra cost of off-site storage is to be included as part of the Bid Proposal.

- B. Materials stored on the site shall be in the area designated by the Construction Manager. Materials or equipment lost through theft, or mishandling, shall be replaced by the Contractor, without cost to the Owner. The Contractor receiving materials shall provide and maintain protection of stored materials at no additional cost to the Owner. The contractor shall retain responsibility for any loss, damage, or replacement costs of any and all stored materials.
- C. Requests for payment for materials delivered and stored at the site must have acceptable itemized bills attached and available at the time of delivery.

**1.08 SCHEDULE OF VALUES**

- A. The Schedule of Values (Section 00670) shall include the following mandatory items for any Contractor who provides on-site labor as a part of their Contract:

- 1. Labor for each portion of the work to be performed.
- 2. Materials for each portion of the work to be performed.
- 3. Performance Bond and Labor & Material Payment Bond (when required by Owner).  
Value: Actual Cost of Bonds
- 4. Daily housekeeping and clean-up inclusive of any special cleaning and preparation required by the specifications for delivering the building for the Owners occupancy.  
Value: Two percent (2%) of the total Contract Amount
- 5. Retainage / Punch List  
Value: Ten percent (10%) of the total Contract Amount

- B. Monthly allocations shall be made to each item as appropriate and as directed by the Construction Manager.
- C. The value of the Housekeeping/Final Clean-Up item shall be two percent (2%) of the Contract value, or as described by the Construction Manager.

**1.09 MATERIAL AND EQUIPMENT EXPEDITING**

- A. The Construction Manager will initiate and coordinate an expediting program on the Owner's behalf in cooperation with each Contractor, incorporating all critical items of material and/or equipment provided under the various Bid Division contracts.
- B. Each Contractor shall provide the Construction Manager with a completed Material and Equipment Purchase/Delivery list and as a part of the Bid Division Descriptions. The Contractor's purchase order issue date, supplier name and phone number and the delivery date for each material and equipment item required for the project must be provided.
- C. Each Contractor shall further cooperate by keeping the Construction Manager informed of all changes in the commitments previously indicated in the Material and Equipment Purchase/Delivery list and when deemed necessary by the Construction Manager, provide source contacts for direct expediting by the Construction Manager.
- D. The Contractor must require all suppliers to notify the Contractor's office a minimum of twenty-four (24) hours prior to the delivery of any materials or equipment so the Contractor is present to receive and unload the delivery.
- E. If a Contractor is not present on the job site to receive and unload the Contractor's material or equipment the Construction Manager may have the owner authorize others to perform the work. All costs associated with such actions will be deducted from the payments due the Contractor.

**1.10 PROTECTION OF THE WORK OF OTHERS**

- A. Contractors shall consider protection of finished Work of prime importance. Care shall be taken by Contractors not to damage completed Work of other Contractors, and to provide adequate protection to their own completed Work. Contractors who damage the work of others or existing finishes shall be back charged all costs associated with repairing or replacing the damaged work.
- B. When moving laborers and/or materials across floors, grades, roofs, other vulnerable surfaces, or through occupied areas, the Contractor shall provide adequate surface protection to prevent damage to surfaces.

**1.11 MANDATORY ATTENDANCE AT MEETINGS**

- A. Each Contractor shall provide a representative of the Contractor authorized and empowered to enact decisions regarding schedule compliance, manpower commitments and cost changes at all Project and Progress Meetings.

**1.12 PRE-ON-SITE ACTIVITY MEETING**

- A. Each Contractor is required to meet on the site with the Field Construction Manager prior to beginning their Work. The purpose of this meeting is to review the intent of the Contract Documents as they pertain to the Contractor's Work, and to integrate the Contractor's schedule into the Short-Term Construction Activities Plan for the Project.

**1.13 RETURN ACTIVITIES**

- A. Each Contractor is required to report to the Field Construction Manager prior to resuming Work on the Project after an absence from the site of one or more working days. The purpose of reporting is to make the Field Construction Manager aware of the Contractor's re-involvement with the Project, and to provide an update regarding any conditions that could affect the continuing Work of the Contractor.

**1.14 CUTTING AND PATCHING**

- A. Each Contractor shall make arrangements with the Construction Manager for fitting their Work into the Project and shall coordinate all fitting with other Contractors. Whenever any contractor has been given sufficient information as to required openings prior to beginning their Work, they shall pay the cost for cutting and/or restoring if they fail to provide proper required openings.
- B. Each Contractor shall be responsible for any cutting, fitting, and patching that may be required to complete their Work if they have failed to properly notify the Construction Manager and preceding Contractors of any openings required. Contractors shall not endanger the Work of any other Contractor by cutting, excavating, or otherwise altering any Work, and shall not cut or alter the Work of any other contractor except with the consent of the Construction Manager. Any costs caused by defective or ill-timed Work shall be borne by the party responsible for such Work.
- C. Cutting or restoring performed by any Contractor, for work that is rejected by the Architect shall be corrected under the direction of the Construction Manager, as instructed by the Architect. The Contractor responsible for the defective restoration shall incur the cost of such Work.
- D. Openings over six inches in diameter must be formed by the concrete contractor(s).
- E. Cutting and patching of concrete floors and decks shall be performed in a neat and workman like manner, using a coring machine. After coring, each Contractor shall pack and grout openings around sleeves or other Work penetrating floors and decks.

- F. No Contractor shall do any cutting that may impair the strength of any building or its components. No holes, except for small screws or bolts, may be drilled in beams or other structural members for the purpose of supporting or attaching Mechanical Work, without prior approval from the Architect.
- G. Each Contractor shall be responsible for the cutting and patching of holes and openings through existing walls, partitions, floors, ceilings, and roofs necessary for the installation of their work. If the location for a hole or opening is through an existing joist, beam, or column, the Contractor shall notify the Construction Manager who, after consultation with the Architect, will instruct the Contractor how to proceed.
- H. Each Contractor shall be responsible for the closing and patching of holes and openings through existing walls, partitions, floors, ceilings, and roofs created by demolition work they are shown to complete unless noted otherwise.
- I. Temporary removal and replacement of all ceilings not scheduled to be replaced shall be the responsibility of the Contractor requiring access.
- J. The Contractor responsible for patching shall provide both the rough (substrate) and finish surfaces. They shall employ only qualified tradesmen to assure that all work is done in a neat and workmanlike manner. All patching shall match adjacent surfaces.

**1.15 BLOCKING, BACKING AND GROUNDS**

- A. Each Contractor shall be responsible for providing the blocking, backing and grounds necessary for the installation of their work unless specifically noted on the drawings in which case said blocking, backing, and grounds shall be provided by the Bid Division supplying shown backing material.

**1.16 ACCESS PANELS**

- A. Each Contractor shall be responsible for furnishing the necessary access panels for items of work installed under their contract.
- B. Installation of all access panels shall be the responsibility of the contractor erecting the wall or ceiling system.
- C. If not specified, these access panels shall be approved by the Architect prior to installation.

**END OF SECTION 01040**



**PART 1 – GENERAL**

**1.01 DESCRIPTION**

- A. All Applications for Payment must be submitted on a “Contractor Invoice Form.”
- B. Contractor Invoice Form(s) will be sent to contractors each month by the Construction Manager. The Contractor Invoice Form must be returned to the Construction Manager by the due date (located in the upper left-hand corner of the form) in order to be included in the current month Cost Control Manual to be submitted to the Owner. The due date can also be found on “Attachment A” of the Owner-Contractor contract.
- C. Any completed Contractors Invoice Form received by the Construction Manager **later** than the contract established due date **will not** be accepted and **will need to be re-billed the following month.**

**1.02 SWORN STATEMENTS AND WAIVERS**

- A. All Applications for Payment must be accompanied by a Sworn Statement and applicable waivers.
- B. For complete instructions on preparing Sworn Statements and Waivers, please reference Section 01050 – Sworn Statements and Lien Waivers.
- C. Final Sworn Statement and Full Unconditional Lien Waivers must be provided prior to the release of the final payment or exchanged for final payment by presenting them in person.

**1.03 SCHEDULE OF VALUES**

- A. All billings are processed based on approved Schedules of Values. Absolutely NO CHANGES may be made to approved Schedule of Values.

**1.04 CHANGE ORDERS**

- A. Increases or decreases in the Contract Amount shall be through change orders.
- B. Each Change Order shall be listed as a new line item on the Contractor Invoice Form. This is the only way a change order will be processed for payment.

**1.05 APPROVAL OR REJECTION OF APPLICATION FOR PAYMENT**

- A. Approved Applications for Payment will be included in the current month Cost Control Manual submitted to the Owner for their approval and payment. Following approval, the Owner will process payments and forward them to the Construction Manager for accompaniment of appropriate waiver(s), and payment will be sent on to Contractor.
- B. Contractors with Applications for Payment that were adjusted or rejected will be contacted by Wolgast for an explanation.
- C. No payment will be issued through the Owner for any progress payment when the substantiating sworn statement and lien waiver(s) from the previous payment have not been received by the Construction Manager.

**END OF SECTION 01045**

**PART 1 – GENERAL**

**1.01 DESCRIPTION**

- A. Sworn Statement shall be included with each Application for Payment.
- B. A sample Sworn Statement follows as Pages 2 and 3 of this Section.
- C. Page 1 of the Sworn Statement shall contain all necessary Project information, including
  - 1. Date of Sworn Statement.
  - 2. County in which the deponent is at the time of the completion of the Sworn Statement.
  - 3. Deponent name.
  - 4. Contractor name on whose behalf the deponent is making statement.
  - 5. County in which the Project is situated.
  - 6. Project name and site location.
  - 7. Deponent signature and typewritten name.
  - 8. Notary name, signature, and commission expiration date.
- D. Page 2 of the Sworn Statement shall contain all necessary Project information, including:
  - 1. Project name and site location.
  - 2. Subcontractor/Supplier listings as submitted for approval at the beginning of the Project.
  - 3. Description of work to be completed by each subcontractor/supplier.
  - 4. Total contract amount for each subcontractor/supplier.
  - 5. Listings of amounts paid, amounts owing, retentions held, and balances to complete.

**1.02 WAIVERS**

- A. All Applications for Payment must be accompanied by a Sworn Statement and applicable waivers.
- B. Sample “partial” and “full” waivers follow as Pages 4 and 5 of this Section.

**1.03 APPLICATION AND CERTIFICATE FOR PAYMENT**

- A. No payment will be issued through the Owner for any progress payment when the substantiating sworn statement and lien waiver(s) from the previous payment have not been received by the Construction Manager.
- B. For additional information and instructions on the Application and Certificate for Payment, please reference Section 01045.

**Sample Sworn Statement**

STATE OF MICHIGAN  
COUNTY OF \_\_\_\_\_

\_\_\_\_\_ Being duly sworn, deposes and says that  
\_\_\_\_\_ Is the Contractor for an improvement to the following described real property situated in  
\_\_\_\_\_ COUNTY, MICHIGAN, known as \_\_\_\_\_. That the following is a statement of each subcontractor and  
supplier and laborer, for which laborer the payment of wages for fringe benefits and withholdings is due but unpaid, with whom the contractor has  
subcontracted for performance under the contract with the owner or lessee thereof, and that the amounts due to the persons as of the date hereof  
are correctly and fully set forth opposite their names, as follows on Page 2.

That the contractor has not procured materials from, or subcontracted with, any other person other than those set forth and owes no money for the  
improvement other than the sums set forth.

Deponent further says that he or she makes the foregoing statement as the contractor for the purpose of representing to the owner or lessee of the  
above described premises and his or her agents that the above described property is free from claims of construction liens, or the possibility of  
construction liens, except as specifically set forth and except for claims of Construction Lien Act, Act No. 497 of the Public Acts of 1980, as amended,  
being Section 570.1109 of the Michigan Compiled Laws.

\_\_\_\_\_  
Deponent Signature

\_\_\_\_\_  
Deponent Name – Typewritten

\_\_\_\_\_  
Subscribed and sworn before me this \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_\_.

\_\_\_\_\_  
Notary Public Signature

\_\_\_\_\_  
Notary Public Name – Typewritten

My commission expires: \_\_\_\_\_

Warning to the owner; an owner or lessee of the above described property may not rely on this sworn statement to avoid the claim of a  
subcontractor, supplier, or laborer who has provided a notice of furnishing or a laborer who may provide a notice of furnishing pursuant to Section  
109 of the Construction Lien Act to the designee or the owner of lessee if the designee is not named or has died.

Warning to the deponent; a person, who with intent to defraud, gives a false sworn statement is subject to criminal penalties as provided in Section  
110 of the Construction Lien Act, Act No. 497 of the Public Acts of 1980, as amended, being Section 50.1110 of the Michigan Compiled Laws.



**PARTIAL UNCONDITIONAL WAIVER OF LIEN  
Subcontractor/Supplier**

Check No. \_\_\_\_\_

Amount: \$ \_\_\_\_\_

Invoice#: \_\_\_\_\_

I/we have a contract with **Bay City Public Schools – 2024 Sinking Fund Bid Pack 11 Eastern HS at Handy MS** to provide

\_\_\_\_\_ For the improvement of the property described as **Bay City Public Schools**, and hereby waive my/our construction lien to the amount of \$ \_\_\_\_\_ for labor/materials provided through \_\_\_\_\_.

This waiver, together with all previous waivers, if any, (circle one) DOES / DOES NOT cover all amounts due to me/us for contract improvement through the date shown above.

\_\_\_\_\_  
(Name of Lien Claimant)

By: \_\_\_\_\_ Signed on: \_\_\_\_\_  
(Signature of lien claimant or authorized officer or agent of lien claimant) (Date)

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Telephone: \_\_\_\_\_

**FULL UNCONDITIONAL WAIVER OF LIEN  
Subcontractor/Supplier**

Check No. \_\_\_\_\_

Amount: \$ \_\_\_\_\_

Invoice#: \_\_\_\_\_

My/our contract with **Bay City Public Schools – 2024 Sinking Fund Bid Pack 11 Eastern HS at Handy MS**  
to provide

\_\_\_\_\_ For the improvement of the property described as **Bay City Public Schools**, having been fully paid and satisfied, all my/our construction lien rights against such property and hereby waived and released.

\_\_\_\_\_  
(Name of Lien Claimant)

By: \_\_\_\_\_ Signed on: \_\_\_\_\_  
(Signature of lien claimant or authorized officer or agent of lien claimant) (Date)

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Telephone: \_\_\_\_\_

**END OF SECTION 01050**

**PART 1 – GENERAL**

**1.01 DESCRIPTION**

- A. The Change Event Form will be used to document any request for a change in the scope of the Work throughout the construction process, and establish owner and architect approval prior to preparing a change order or having work performed.
- B. The Change Event Form will only be used when it IS NOT NECESSARY for work to be performed immediately.

**1.02 PROCESSING OF CHANGE EVENT FORMS**

- A. The Owner, Architect, Engineer, Construction Manager or Contractor may initiate a request for change during the Project in the form of a bulletin/proposal request, construction change directive, request for information, or value engineering proposal. Requests for changes shall be submitted to the Construction Manager for preparation and distribution of the Change Event Form.
- B. The Change Event will be accompanied by a copy of all related sketches, drawings, specifications, instructions, etc.
- C. The Construction Manager will forward the Change Event to the Contractor for the purposes of obtaining an itemized quote (including labor, material, equipment, units, rates, and subtotals) for the changes requested.
- D. The Contractor will complete and return the Change Event Form within five (5) days, or less, to the Construction Manager.
- E. The Construction Manager will review all Change Events and itemized detail for accuracy and validity within 48 hours of receiving said information.
- F. If the Construction Manager approves the costs or deductions submitted by the Contractor in the Change Event, the Construction Manager will:
  - 1. Forward one (1) copy of the Change Event with itemized detail to the Architect for review and endorsement, stipulating the date by the endorsed Change Event is to be returned.
  - 2. Discuss the Change Event and costs or deductions with the Architect to secure their endorsement.
  - 3. Forward one (1) copy of the Change Event with itemized detail to the Owner for approval and signature.
- G. After receiving the endorsed Change Event(s) timely from the Architect and Owner, the Construction Manager will prepare a Change Order for Contractor signature. The Contractor will sign the Change Order, acknowledging notice to proceed with change, and return a copy back to the Construction Manager.
- H. Only Change Events with the Architect's and Owner's signature of approval and acceptance will be processed into Change Orders.

**1.03 PRICING GUIDELINES FOR CHANGE EVENTS**

- A. Pricing Guidelines for Change Events that will be considered for Change Orders shall be fully detailed and itemized showing each of the following:
  - 1. Labor: All field labor indicating worker name, date, and hours worked and hourly rate; hourly rate shall be based on straight time only and shall include the labor classification.

2. Fringes: All established payroll taxes, assessments and fringe benefits on the labor in 7.3.2.1; this may include, but is not limited to, FICA, Federal and State unemployment, Health and Welfare and Workers Compensation; each of the fringes is to be a separate line item.
3. Material: All material purchased by the Contractor and incorporated into the changed Work, showing quantities, unit costs and costs of each item as appropriate; material costs will only be allowed at the Contractor's actual cost including any and all discounts, rebates or related credits. Only one third (33 percent) of the cost of reusable materials for each use, such as formwork lumber, shoring or temporary enclosures will be allowed.
4. Equipment: Rental Equipment – charges for certain non-owned, heavy or specialized equipment up to 100 percent of the documented rental costs; no rental charges will be allowed for hand tools, minor equipment, simple scaffolds, etc.; downtime due to Contractor caused delays, repairs, maintenance, late fees and weather will not be allowed. Owned Equipment – charges for certain owned, heavy or specialized equipment up to 100 percent of the cost listed by the Associated Equipment Dealers Blue Book; no charges will be allowed for hand tools, minor equipment, simple scaffolds, etc.; only the actual time the equipment is necessary to be in use to perform the work will be allowed; downtime due to Contractor caused delays, repairs, maintenance and weather will not be allowed.
5. A total amount of ten (10) percent of the total of all labor, materials and equipment performed by the Contractor's own forces shall be allowed for the Contractor's combined overhead and profit.
6. A total amount of ten (10) percent of the total of all extra work performed by the Contractor's Subcontractor(s) shall be allowed for the Contractor's combined overhead and profit.
7. For work deleted, that would have been completed by the Contractor or the Contractor's Subcontractor(s) an amount equaling the cost of the Work plus an amount equaling five (5) percent of the work shall be credited to the owner.

**1.04 TIME LIMIT**

- A. Contractor must return the Change Event and respective price quotations within five (5) working days, unless noted otherwise on the Construction Management issued Change Event.
- B. Failure to return the completed Change Event within the predefined time period will indicate the contractor shall have no charge for the associated work within their bid division per the Change Event at no additional cost to the Owner, Construction Manager and Architect.

**END OF SECTION 01051**



**PART 1 – GENERAL**

**1.01 DESCRIPTION**

- A. The Change Order Document is the legal instrument used to modify the Contract Documents.
- B. Change Orders will be prepared, as necessary, following the acceptance of the Change Event amount by the Owner (Section 01051).
- C. A sample Change Order follows as page 2 of this Section.

**1.02 PROCESSING OF CHANGE ORDERS**

- A. All changes and potential changes to the Project shall be documented by using the Change Event Form (Section 01051).
- B. Complete and approved Change Events will be converted into Change Orders as necessary.
- C. One (1) original Change Order shall be prepared by the Construction Manager and forwarded to the Contractor for signature. Signatory parties shall include: the Contractor only on Change Order.

**1.02 PRICING GUIDELINES**

- A. Pricing Guidelines for Change Events that will be considered for Change Orders shall be fully detailed and itemized showing each of the following:
  - 1. Labor: All field labor indicating worker name, date, and hours worked and hourly rate; hourly rate shall be based on straight time only and shall include the labor classification.
  - 2. Fringes: All established payroll taxes, assessments, and fringe benefits on the labor in 7.3.2.1; this may include, but is not limited to, FICA, Federal and State unemployment, Health and Welfare and Workers Compensation; each of the fringes is to be a separate line item.
  - 3. Material: All material purchased by the Contractor and incorporated into the changed Work, showing quantities, unit costs and costs of each item as appropriate; material costs will only be allowed at the Contractor's actual cost including any and all discounts, rebates or related credits. Only one third (33 percent) of the cost of reusable materials for each use, such as formwork lumber, shoring or temporary enclosures will be allowed.
  - 4. Equipment: Rental Equipment – charges for certain non-owned, heavy, or specialized equipment up to 100 percent of the documented rental costs; no rental charges will be allowed for hand tools, minor equipment, simple scaffolds, etc.; downtime due to Contractor caused delays, repairs, maintenance, late fees and weather will not be allowed. Owned Equipment – charges for certain owned, heavy or specialized equipment up to 100 percent of the cost listed by the Associated Equipment Dealers Blue Book; no charges will be allowed for hand tools, minor equipment, simple scaffolds, etc.; only the actual time the equipment is necessary to be in use to perform the work will be allowed; downtime due to Contractor caused delays, repairs, maintenance and weather will not be allowed.
  - 5. A total amount of ten (10) percent of the total of all labor, materials and equipment performed by the Contractor's own forces shall be allowed for the Contractor's combined overhead and profit.

6. A total amount of ten (10) percent of the total of all extra work performed by the Contractor's Subcontractor(s) shall be allowed for the Contractor's combined overhead and profit.
7. For work deleted, that would have been completed by the Contractor or the Contractor's Subcontractor(s) an amount equaling the cost of the Work plus an amount equaling five (5) percent of the work shall be credited to the owner.

**CHANGE ORDER**

---

PROJECT:

PROJECT NO:

CHANGE ORDER NO.:

CHANGE ORDER DATE:

CONTRACT DATE:

CONTRACT NO.:

CONTRACTOR:

ARCHITECT:

OWNER:

---

It is hereby agreed to make the following changes to the Contract:

- 1. QR#
- 2. N/A
- 3. N/A
- 4. N/A
- 5. N/A

This work described by this Change Order becomes a part of and is to be performed by the same terms as the existing Contract. This Change Order must be signed by the Owner, Architect, and Contractor to be valid.

The Original Contract Sum.....	\$
Net change by previously authorized Change Orders.....	\$
The Contract Sum prior to this Change order.....	\$
The Contract Sum will be <input type="checkbox"/> increased / <input type="checkbox"/> decreased by this Change Order.....	
The new Contract Sum including this Change Order is.....	\$

<u>Contractor</u> _____	<u>Architect</u> _____	<u>Owner</u> _____
-------------------------	------------------------	--------------------

<u>By:</u> _____	<u>By:</u> _____	<u>By:</u> _____
------------------	------------------	------------------

<u>Date:</u> _____	<u>Date:</u> _____	<u>Date:</u> _____
--------------------	--------------------	--------------------

DISTRIBUTION - FULLY EXECUTED CHANGE ORDERS ARE COPIED AND DISTRIBUTED AS FOLLOWS:  
White (original) – Owner; Blue – Construction Manager; Green – Contractor; Yellow – Architect

**END OF SECTION 01053**

**PART 1 – GENERAL**

**1.01 LAYOUT AND MEASUREMENTS**

- A. The responsibility for accurate layout and measurement of the Work of each Contractor is their own. In addition, each Contractor shall verify the dimensional accuracy of the Work upon which their own Work relies before they begin their Work. They shall report all inaccuracies to the Construction Manager and shall not proceed until all corrections are made. If a Contractor proceeds with their Work on dimensionally inaccurate Work of another Contractor, they shall be liable for the cost of corrections to their own Work when the error is corrected and shall cooperate in the correction as directed by the Construction Manager.
- B. The Owner, through the Construction Manager, will provide a bench mark and baseline for all Contractors' reference.
- C. If the Construction Manager performs layout work or must arrange for others to perform layout work that is the responsibility of the Contractor, those costs will be charged to the Contractor. The costs will be submitted to the Owner and the Owner will deduct those costs from the Contractor's contract payment.

**END OF SECTION 01055**

**PART 1 – GENERAL**

**1.01 PREVAILING WAGE**

- A. This project shall be subject to the prevailing wage laws of the State of Michigan.
- B. The Owner has requested the prevailing wage rates applicable for this project and project location. The applicable prevailing wage rates provided by the Owner are enclosed on the following pages.
- C. The Owner and Construction Manager expressly rely upon the contractor to satisfy the pay requirements of the prevailing wage laws of the State of Michigan.
- D. Each proposal shall include the Prevailing Wage for Bay County as of the latest published issue by the State of Michigan.

Will be distributed at a later date.

**END OF SECTION 01060**

**PART 1 – GENERAL**

**1.01 DESCRIPTION**

A. Work included:

1. Throughout the Contract Documents, reference is made to codes and standards which establish qualities and type of workmanship and materials, and which establish methods for testing and reporting on the pertinent characteristics.
2. Where materials or workmanship are required by these Contract Documents to meet or exceed the specifically named code or standard, it is the Contractor's responsibility to provide materials and workmanship that meet or exceed the specifically names code or standard.
3. It is also the Contractor's responsibility, when so required by the Contract Documents or by written request from the Owner, to deliver to the Owner all required proof that the materials or workmanship, or both, meet or exceed the requirements of the specifically named code or standard. Such proof shall be in the form requested in writing by the Owner, and generally will be required to be copies of a certified report of tests conducted by a testing agency approved for that purpose by the Owner.

B. Related Work Described Elsewhere:

1. Specific naming of codes or standards occurs on the Drawings and other Sections of these specifications.

**1.02 QUALITY ASSURANCE**

A. Familiarity with Pertinent Codes and Standards.

1. In procuring all items used in this Work, it is the Contractor's responsibility to verify the detailed requirements of the specifically named codes and standards and to verify that the items procured for use in this Work meet or exceed the specified requirements.

B. Rejection of Non-Complying Items.

1. The Owner reserves the right to reject items incorporated into the Work which fail to meet the specified minimum requirements.
2. The Owner further reserves the right and without prejudice to other recourse the Owner may take, to accept non-complying items subject to an adjustment in the Contract Amount as approved by the Owner.

C. Applicable standards listed in these Specifications include, but are not necessarily limited to, standards promulgated by the following agencies and organizations:

1. AASHTO – American Association of State Highway and Transportation Officials, 341 National Press Building, Washington, D.C. 20004.

ACI – American Concrete Institute, Box 19150, Redford Station, Detroit, Michigan 48219

AISC – American Institute of Steel Construction, Inc., 1221 Avenue of the Americans, New York, New York, 10020.

ANSI – American National Standards Institute (successor to USASI and ASAO), 1430 Broadway, New York, New York 10018.

ASTM – American Society for Testing Materials, 1916 Race Street, Philadelphia, Pennsylvania 19103.

AWS – American Welding Society, Inc., 2501 N.W. 7<sup>th</sup> Street, Miami, Florida 33125.

AWWA – American Water Works Association, Inc., 6666 West Quincy Avenue, Denver, Colorado 80235.

BOCA – Building Officials Code Administrators International, Inc. 17926 South Halsted Street, Homewood, Illinois 60460.

CRSI – Concrete Reinforcing Steel Institute, 228 North LaSalle Street, Chicago, Illinois 60610.

CS – Commercial Standard of NBS, U.S. Department of Commerce, Government Printing Office, Washington, D.C. 20402.

FGMA – Flat Glass Marketing Association, 3310 Harrison, Topeka, Kansas 66611.

State of Michigan Fire Marshall Bulletin 412.0.

NAAMM – The National Association of Architectural Metal Manufacturers, 1033 South Boulevard, Oak Park, Illinois 60302.

NEC – National Electric Code (see NFPA).

NEMA – National Electrical Manufacturer’s Association, 155 East 44<sup>th</sup> Street, New York, New York 10017.

NFPA – National Fire Protection Association, 470 Atlantic Avenue, Boston, Massachusetts 02210.

SDI – Steel Deck Institute, 135 Addison Avenue, Elmhurst, Illinois 60125.

SSPC – Steel Structures Painting Council, 4400 Fifty Avenue, Pittsburgh, Pennsylvania 15213.

TCA – Tile Council of America, Inc., P.O. Box 326, Princeton, New Jersey 08540.

UL – Underwriters’ Laboratories, Inc., 207 East Ohio Street, Chicago, Illinois 60611.

Fed. Specs, and Fed. Standards: Specifications Sales (3FRI), Building 197, Washington Navy Yard, General Service Administration, Washington, D.C. 20407.

UBC – Uniform Building Code, International Conference of Building Officials, 5360 South Workman Mill Road, Whittier, California 90601.

**END OF SECTION 01085**

**PART 1 – GENERAL**

**1.01 ALTERNATES**

- A. This section identifies each alternate by number and describes the basic changes to be incorporated into the work, only when that alternate is made a part of the Work by specific provisions in the Owner-Contractor Agreement.
- B. Related Requirements in other parts of the Project Manual:
  - 1. Method of quotation of the cost of each alternate, and the basis of the Owner’s acceptance of alternates: Bidding Documents
  - 2. Incorporation of alternates into the Work: Owner-Contractor Agreement.
- C. Related Requirements Specified in Other Sections:
  - 1. Part 1.01: Description of Work
  - 2. Sections of the Specifications as listed under the respective Alternates.
- D. Referenced sections of specifications stipulate pertinent requirements for products and methods to achieve the work stipulated under each Alternate.
- E. Coordinate pertinent related work and modify surrounding work as required to properly integrate the work under each Alternate and to provide the complete construction required by the Contract Documents.
- F. The Owner reserves the right to accept the proposed amount for any alternate at any time during the active construction of the project. If the Owner elects to accept an alternate after the Owner-Contractor contract has been issued, the work shall be added to the contract by change order.

**1.02 DESCRIPTION OF ALTERNATES**

[See proposal form](#)

**END OF SECTION 01100**



**PART 1 – GENERAL**

**1.01 PRE-CONSTRUCTION MEETINGS**

- A. Prior to the initiation of on-site activity, a meeting will be held with all Bid Division Contractors for the purpose of planning, scheduling, and coordinating an orderly initiation of on-site construction activity. Attendance at this meeting is required of all Contractors. The Construction Manager will advise all Contractors of the time and location of this meeting.
- B. A representative of the contractor authorized to enact decisions regarding schedule, manpower commitments and costs must attend the pre-construction meeting.

**1.02 PRE-CONSTRUCTION CONFERENCES**

- A. Each Contractor is required to meet on the site with the Construction Manager prior to beginning their Work. The purpose of this meeting is to review the intent of the Contract Documents as they pertain to the Contractor's Work, and to integrate the initiation of that Work with the Work already in progress on the site.

**1.03 PROGRESS AND PROJECT MEETINGS**

- A. Contractors active on-site shall be required to attend Progress and Project Meetings when called by the Construction Manager. These meetings are for the purpose of planning and assessing construction progress and for discussing problems of mutual concern.
- B. It is mandatory that any contractor actively engaged in work on site shall be required to have a representative of the contractor authorized and empowered to enact decisions regarding schedule, manpower commitments and costs and their superintendent attend these meetings, or the Owner may withhold the Contractor's payment.
- C. All decisions, instructions, and interpretations given by the Owner or their designated representatives at these meetings shall be conclusive and shall be binding on the Contractors.
- D. The proceedings of such meetings will be recorded and posted. Copies will be forwarded to Contractors.

**END OF SECTION 01200**

**PART 1 – GENERAL**

**1.01**

- A. Contractor shall be solely responsible to submit all shop drawings, product data, and samples, or other items required by the Construction Documents hereinafter referred to as submittals to the Construction Manager for processing and forwarding to the Architect for their review.
- B. Submittals shall be delivered to the Construction Manager's office in accordance with the procedures and dates required by the Construction Documents and/or this section, Section 01300, of the project manual (specifications) whichever is more stringent in its requirement. All submittals shall be provided to the Construction Manager within 30 calendar days of receipt of the signed contract or Notice to Proceed unless specified otherwise in the Construction Documents.

**1.02 SUBMITTALS - SHOP DRAWINGS, PRODUCT DATA AND SAMPLES**

- A. The Contractor shall submit to the Construction Manager individual submittals either via Procore or email. All files must include the specification number, item number and name as indicated in the submittal log.
- B. Contractor shall provide electronic copies of submittals. The submittals shall be in PDF format only. COLOR SAMPLES MUST BE SUBMITTED AS PHYSICAL SAMPLES.
- C. In submitting shop drawings, product data and samples, each Contractor represents that they have checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents. All submittals must be stamped or signed by the contractor responsible for submitting, to attest to their review.

**ALL SUBMITTALS MUST BE ACCOMPANIED BY THE WOLGAST CORPORATION SHOP DRAWING / SUBMITTAL FORM (see Page 2 of this section).**

- D. Any submittal not accompanied by the Wolgast Corporation Shop Drawing / Submittal Form will be returned to the contractor for resubmittal.
- E. The Submittal Log provided as part of the Bid Division Descriptions shall be a guideline only and is not to be a representation of every or all submittals required for the completion of the Project. The Contractor shall be required to provide all items and perform all work in complete compliance with the Contract Documents.
- F. The Contractor shall not be relieved of the responsibility for any deviation in the work required by the Contract Documents, or any errors and omissions contained in shop drawings, product data; samples, or other submittal data reviewed and returned to the Contractor by the Architect. Any work performed prior to the Architect's review shall be subject to removal and replacement at the Contractor's expense.
- G. No portion of the Work requiring submission of shop drawings, product data or samples shall commence until the submission has been reviewed by the Architect. If any work is performed prior to the Architect's review of the required submittal(s), the work shall be subject to removal and replacement at the Contractor's expense if that work does not comply with the requirements of the contract documents.

**1.03 START-UP DOCUMENTS (CONTRACT-AWARD SUBMITTALS)**

- A. (Refer to Sections 00100, 00600, 00650, 00670, 00680, 00690.)

**1.04 CONTRACT CLOSEOUT DOCUMENTS (CLOSE-OUT SUBMITTALS)**

- A. (Refer to Sections 01700, 01720, 01730, and 01740.)

**END OF SECTION 01300**



**PART 1 – GENERAL**

**1.01 CONSTRUCTION SCHEDULES**

- A. A Milestone Schedule is provided as part of the bidding documents to indicate dates by which certain critical tasks and/or portions of the project must be completed. The Milestone schedule also indicates the date by which the Project must be 100% complete, receipt of final inspections, occupancy allowed by all governing authorities, and owner move-in.
- B. Based on the Milestone Schedule each Contractor shall submit to the Construction Manager, at or prior to the Pre-Construction Meeting, two (2) copies of the proposed progress schedule for their Work identifying the critical tasks that they must complete to achieve the Milestone Schedule completion dates.
- C. The Construction Manager will utilize the scheduling input from the Contractors for incorporation into the Project Construction Schedule. The Project Construction Schedule will be compiled and distributed to all contractors.
- D. By signing the Owner-Contractor Agreement the Contractor agrees to cooperate with all of the other multiple contractors and to coordinate all construction activities to allow the work of that contractor and all other contractors to meet the completion date(s) established in the Milestone Schedule. The Contractor also agrees that the Project Construction Schedule shall be followed to achieve or improve upon the completion dates for the various tasks in order to attain the final completion of the project by the scheduled completion date.
- E. The Construction Manager will, at times, issue a weekly Look-Ahead Schedule as part of the weekly Contractor Coordination Meetings. The Look-Ahead Schedule will support the Project Construction Schedule and provide specific scheduling information for the Contractor to assure the scheduled completion dates are achieved. The Contractor agrees to comply with the required work identified in the Look-Ahead Schedules.

**END OF SECTION 01350**

**PART 1 – GENERAL**

**1.01 QUALITY CONTROL BY PROJECT ARCHITECT AND CONSTRUCTION MANAGER**

- A. Each Contractor shall comply with the quality control provisions of the Contract Documents.
- B. The quality and completeness of the Work shall be maintained on a day-to-day basis. Inaccurate, faulty, incomplete, and defective Work shall be corrected by the Contractor without continuous prodding by the Construction Manager. Failure to cooperate in this continuous punch list effort may reduce Progress Payments.

**1.02 CONTRACTOR QUALITY CONTROL**

- A. Each Contractor shall be responsible to provide a quality workmanship consistent with the requirements of the Contract Documents. All Work will be of good quality and free from faults and defects. Every care shall be exercised to ensure that the quality specified is the quality provided.
- A. If at any time a Contractor is of the opinion that the quality of their Work is, or will be, jeopardized as a result of rescheduling or coordination of the Project, or for any other reason known to them, they shall stop work immediately and shall inform the Construction Manager of their action and the reasons thereof. The Contractor shall immediately provide a written explanation to the Field Construction Manager and Project Manager for the record, and shall mail a copy to the Architect. Upon investigation by the Construction Manager, a decision will be made on the note of jeopardy, in order to resolve the problem.
- C. Any Contractor who compounds a mistake by installing their product on another Contractor's obviously faulty work will assume responsibility for repair of said work.

**END OF SECTION 01400**

**PART 1 – GENERAL**

**1.01 DESCRIPTION**

- A. The Owner may employ and pay for the services of an independent testing laboratory to perform specified testing as identified in the Bid Division Descriptions.
- B. Contractors shall cooperate with the Laboratory to facilitate the execution of this service.
- C. Employment of the Laboratory shall in no way relieve the Contractor's obligation to maintain the quality of their work.

**1.02 CONTRACTOR'S RESPONSIBILITIES**

- A. Contractors shall cooperate with Laboratory personnel, and shall provide access to Work, and to manufacturers' operations.
- B. Contractors shall provide the Laboratory samples of proposed materials, which require testing.
- C. Contractors shall provide to the Laboratory the preliminary design mix proposed to be used for concrete and other materials, which require control, by the Laboratory.
- D. Contractors shall furnish all test results and coordinate testing with the Construction Manager.
- E. Contractors shall furnish incidental labor and facilities necessary:
  - 1. To provide access to Work to be tested.
  - 2. To obtain and handle samples at the Project site or at the source of the project to be tested.
  - 3. To facilitate inspections and tests.
- F. Contractors shall notify the Laboratory sufficiently in advance of operations to allow for Laboratory assignment of personnel and scheduling of tests.
- G. Contractors shall make arrangements with the Laboratory and pay for additional samples and tests required for the Contractor's convenience.
- H. Contractors shall comply with the Project Team's instructions regarding testing.

**END OF SECTION 01410**

**PART 1 - GENERAL**

**1.01 DESCRIPTION**

- A. The Owner will allow each Contractor to use power and water, where available, for use in construction. All usage will be arranged for by the Construction Manager.

**1.02 REQUIREMENTS OF REGULATORY AGENCIES**

- A. Comply with the National Electric Code.
- B. Comply with federal, state and local codes and regulations and with utility company requirements.

**1.03 MATERIALS, GENERAL**

- A. Cords, connectors, etc. may be new or used, but must be adequate in capacity for the required usage, must not create unsafe conditions, and must not violate requirements of applicable codes and standards.

**1.04 TEMPORARY ELECTRICITY AND LIGHTING**

- A. The Electrical Contractor shall furnish, install and maintain a complete and adequate temporary electrical service and distribution system for use by the Construction Manager and all Contractors during the construction period.
- B. The Electrical Contractor shall obtain, provide, and pay for all temporary electrical power service installation from the local power company or the existing building if the capacity is available.
- C. The cost of electrical power consumption shall be paid for by the Owner.
- D. Prior to the start of construction, the Electrical Contractor shall provide temporary power at each construction area and at the office of the Construction Manager. Each temporary service will be sufficient in size to provide continuous power for: twelve (12) ground fault protected, 20 amp, duplex receptables; two (2) 220v, 3 phase 40 amp receptable; 20 amp, 120v grounded temporary lighting circuits to provide for a minimum of one (1) lamp holder for each 200 square feet or a minimum of one (1) per room. Each lamp holder will be provided with one (1) 150 watt lamp and guard with no more than twelve (12) lamps per circuit. The Electrical Contractor shall be responsible for replacing all lamps as required.
- E. All wire and cable shall be sized to hold voltage drop at all outlets to a maximum of 5% total from transformer.
- F. Portions of the permanent electrical system may, at the option of the Electrical Contractor, be used for temporary power and lighting. The Electrical Contractor shall replace all burned out lamps, damaged wiring devices, and plates prior to acceptance of building by Owner. When any part of the permanent electrical system is used for temporary power or lighting, the Electrical Contractor will maintain the system until the final acceptance by the Owner and begin all warranties and guarantees upon the date of substantial completion.
- G. Overtime work requiring standby electricians shall be at the expense of the Contractor requiring the same.
- H. Installation of temporary electrical power and lighting shall be as scheduled by the Construction Manager.
- I. All temporary electrical installations shall be in compliance with the latest National Electrical Code (N.E.C.), MIOSHA or OSHA, whichever is more stringent. Compliance with N.E.C Section 210-8(b) shall be the responsibility of the Electrical Contractor. Assured grounding systems as defined in Exception Number 2 of N.E.C. Section 210-8(b) shall not be used in place of ground fault protection 9.

The Electrical Contractor shall completely remove the temporary electrical service and distribution system when directed to do so by the Construction Manager. The contractors responsible for the installation of all ceilings and partitions shall patch their work as necessary after removal of the temporary electrical system at no additional cost to the Construction Manager or Owner.

- J. The Owner shall pay for all electrical energy consumed during the construction period except for energy consumed to provide power or lighting in excess to those listed in this Article.
- K. Any electrical requirements for power or lighting beyond those listed in this Section (including energy charges) shall be the responsibility of the Contractor requiring them.

**1.05 TELEPHONE SERVICE**

- A. A telephone, if located at the Construction Manager's Field Office, may be provided for all Contractors' use in making local or long-distance calls.

**1.06 WATER**

- A. A temporary water distribution center will be provided in a nearby convenient location. The Contractor shall supply all hoses, etc. beyond that point.

**1.07 SANITARY FACILITIES**

- A. The Construction Manager will arrange for temporary sanitary facilities. Contractors shall not use permanent facilities at the site.

**1.08 TEMPORARY HEAT**

- A. When identified and required by the H.V.A.C. Contractor's Bid Division Description, the H.V.A.C. contractor shall install a heating system (permanent or temporary) in readiness for furnishing temporary heat in the new structure.
- B. When the H.V.A.C. Contractor is required to provide a temporary heating system, the H.V.A.C. Contractor shall operate and maintain the temporary heating system. The temporary heating system shall maintain a minimum temperature at all times of 40 degrees during rough-ins and 60 degrees during finishing operations. The H.V.A.C. contractor shall be responsible for the costs of all temporary electrical work relating to the temporary heating system if the permanent system is not used.
- C. In the event that temporary gas fired or open flame heating devices are used, they shall be of the heat exchanger type properly vented to the outdoors, and shall comply with local and state laws, codes, and ordinances.
- D. Portions of the new heating system may, at the option of the H.V.A.C. contractor, be used for temporary heat providing that all parts of the system are cleaned and restored to prime condition prior to acceptance. The H.V.A.C. contractor shall remove any filters used during the temporary heating period and replace with new filters. In addition, the H.V.A.C. subcontractor shall pay the cost of extending warranty and guarantee periods on any permanent equipment used prior to Substantial Completion. The H.V.A.C. contractor shall completely remove the temporary heating system when directed to do so by the Construction Manager.
- E. When identified and required by the H.V.A.C. Contractor's Bid Division Description, all or portions of the new (permanent) H.V.A.C. system shall be used for temporary heat. When the new/permanent system is used for temporary heat, the H.V.A.C. Contractor shall:



1. Maintain the system throughout its use.
2. At the end of the system's use as a temporary system, the H.V.A.C. Contractor shall replace all filters with new filters.
3. Cover openings in permanent return air ductwork with filter media. Maintain and replace filter media as required so air flow is not restricted.
4. Clean and restore all parts of the system to prime condition immediately prior to final acceptance by the Owner.
5. Provide the full warranty and guarantee of the entire system with the warranty/ guarantee period beginning at the time of final acceptance by the Owner.

F. All fuel costs for Temporary Heat shall be paid fo by the Owner.

**1.09 EXECUTION**

A. Each Contractor shall maintain and operate systems to assure continuous service, and avoid disruption of service.

**1.10 REMOVAL**

- A. Each Contractor shall promptly remove their own temporary materials and equipment when their use is no longer required.
- B. Each Contractor shall clean and repair damage they have caused by temporary installations or use of temporary facilities.
- C. Each Contractor shall restore existing facilities they have used for temporary services to their specified or original condition.

**END OF SECTION 01510**

**PART 1 – GENERAL**

**1.01 DESCRIPTION**

- A. Each Contractor shall furnish, install, and maintain construction aids required for the performance of their own Work, and shall move or remove them when they are no longer needed for the Work.
- B. Certain construction aids will be provided for and maintained by the Owner as indicated in later paragraphs in this Section.

**PART 2 – PRODUCTS**

**2.01 MATERIALS, GENERAL**

- A. Materials may be new or used, shall be suitable for their intended purposes, and shall not violate the requirements of applicable codes and standards.

**2.02 CONSTRUCTION AIDS**

- A. Each Contractor shall provide all required construction aids and equipment to facilitate the execution of the Work, including scaffolds, staging, ladders, and other such facilities and equipment.
- B. Contractors shall maintain all facilities and equipment in a first-class condition.

**2.03 TEMPORARY ENCLOSURES**

- A. The Construction Manager will arrange for temporary enclosures except those required by section 01900 – 2.01 to separate work areas from the areas of existing buildings occupied by the Owner to prevent penetration of dust or moisture into occupied areas, to prevent damage to existing equipment, and to protect the Owner’s employees, customers, and operations from construction work.

**PART 3 – EXECUTION**

**3.01 PREPARATION**

- A. Consult with the Owner, Construction Manager, and other Consultants and review the site conditions and other factors, which could affect construction procedures and construction aids, including adjacent properties and public facilities which may be affected by execution of the project.

**3.02 GENERAL**

- A. Comply with applicable requirements of the Specifications.
- B. Relocate construction aids as required by the progress of construction, by storage requirements, and to accommodate requirements of the Owner and other Contractors employed at the site.

**3.03 REMOVAL**

- A. Completely remove temporary materials, equipment, and services:
  - 1. When construction needs can be met by use of permanent construction.
  - 2. At the completion of the Project.
- B. Clean and repair damage to the permanent facilities caused by installation or by use of temporary facilities.
- C. Restore existing facilities used for temporary purposes to specified or original condition.

**END OF SECTION 01520**

**PART 1 – GENERAL**

**1.01 DESCRIPTION**

- A. Safety is the responsibility of each individual Contractor. Each Contractor shall comply with all local safety ordinances and MIOSHA regulations and requirements while performing the Work.
- B. Each Contractor is required to submit Safety Data Sheets (SDS) to the Construction Manager via Procore or email, to be used for reference only, prior to transporting the material/chemical on site. In addition, it is the responsibility of each Contractor to maintain an accessible SDS file for their employees, subcontractors, sub-subcontractors, and suppliers that are on site.
- C. Each Contractor shall submit evidence of an Employer Safety Program that complies with current MIOSHA regulations and requirements prior to beginning any contract Work.
- D. Each Contractor and their Subcontractor(s), Sub-subcontractor(s), and Suppliers shall take all necessary precautions to ensure the safety of the public and/or workers on the job, and to prevent accidents or injury to any persons, on, about, or adjacent to the premises where the Work is being performed. The Contractor and their Subcontractor(s), Sub-subcontractor(s), and Supplier(s) shall comply with Federal or State OSHA regulations and all other laws, codes, ordinances, and regulations relative to safety and the prevention of accidents.
- E. The Contractor shall designate a responsible representative at the jobsite as Safety Representative who shall be responsible for the promotion of safety and prevention of accidents, and shall enforce all applicable laws, ordinances, codes, rules, regulations, and standards pertaining to safety and prevention of accidents.

**END OF SECTION 01530**

**PART 1 – GENERAL**

**1.01 SECURITY**

- A. Each Contractor shall bear full responsibility for protecting equipment, materials, and tools from damage, loss and vandalism.

**END OF SECTION 01540**

**PART 1 – GENERAL**

**1.01 PROJECT ACCESS**

- A. All employees of the Contractor(s), employees of the subcontractor(s) of the Contractor, any and all other persons having any related activity to the Contractor including suppliers & sales representatives, Inspectors, Architect/Engineer Representatives and all other Visitors must report to the Construction Manager Field Supervisor in the CM Site Office before being permitted into the project.
- B. Each worker must register at the site office prior to entering the work area each day that worker is engaged in the required tasks for the construction of the project. The worker shall register by signing their name and issued ID number, identifying the company they represent. The supervising foreman for each Contractor shall be responsible for registering all employees or tier subcontractor employees of that Contractor each day and providing that registration to the CM Field Supervisor.
- C. If Owner requested, all workers will be issued a photo identification badge and corresponding number by the Construction Manager allowing them access to the project. The ID badge shall be always worn. Any person failing to wear the photo ID badge will be required to leave the project immediately.
- D. Only workers performing required tasks for the construction of the project will be permitted access to the project site. Workers not actively engaged in performing required tasks will not be permitted on the project.
- E. Suppliers, sales representatives, and any other person having legitimate business with the Contractor or a subcontractor of any tier to the Contractor must remain at the Site Office until the on-site supervisor for that Contractor or tier subcontractor meets with that person at the CM Site Office.
- F. Any visitor to the project must register at the CM Site Office, request permission from the CM Site Supervisor for access to the project, have their own personal protection equipment as required by the CM Site Supervisor, and be issued a "Visitor" identification badge allowing access to the project.
- G. The CM Site Supervisor may deny any person access to the project for any reason the supervisor may see fit.
- H. The Contractor agrees to adhere to this Project Access policy regardless of all other agreements.

**1.02 ACCESS ROADS**

- A. Contractors' access to the Project site and arrangements for periodic, temporary access for specific construction shall be made through the Construction Manager with the Owner's approval.

**1.03 DELIVERY**

- A. Contractors receiving deliveries to site shall request a 24-hour notice to delivery from suppliers. Contractors receiving deliveries shall ensure that their personnel are at the site to receive deliveries, and properly store them.
- B. Bidders of Divisions for supply only should give 48 hours' notice to the Field Construction Manager so proper arrangements can be made for unloading.
- C. Any Contractors or Bid Division suppliers not giving notice shall reimburse Contractors at the site or be back charged accordingly for unloading and storage of said materials.
- D. Since site space is limited, delivery of materials shall not be made to the jobsite before progress of the job schedule calls for it, unless approved by the Construction Manager.

**1.04 PARKING**

- A. Contractor parking will be in an area designated by the Construction Manager on site.

**1.05 SITE PLAN**

- A. Refer to the Contractors use of premises (Section 01010) for further information on the use of the site.

**END OF SECTION 01550**

**PART 1 – GENERAL**

**1.01 CONTROLS**

- A. Control of elements such as noise, dust, water, pests, rodents, debris, pollution, and erosion are the responsibility of the Contractor(s). The Architect and Construction Manager will identify the Contractor(s) responsible for these controls in the event such controls have not been implemented. The Contractor(s) agrees to abide by the assignment of responsibility by the Architect and Construction Manager regarding such controls when required. The Contractor(s) shall be responsible for performing the control measures in strict conformance to all governing codes and restrictions.

**END OF SECTION 01560**

**PART 1 – GENERAL**

**1.01 TRAFFIC REGULATIONS**

- A. Contractors shall abide by all governmental and Owner-established traffic regulations.
- B. Contractors shall use the route designated by the Owner/Construction Manager and shall comply with the requirements of Section 01550 – Access and Deliveries.

**END OF SECTION 01570**



**PART 1 – GENERAL**

**1.01 DESCRIPTION**

- A. No signs shall be displayed by any Contractor.

**END OF SECTION 01580**

**PART 1 – GENERAL**

**1.01 DESCRIPTION**

- A. The Project Field Office will be located on-site adjacent to the location of the temporary power.
- B. The Project Field Office will be used by the Owner, Construction Manager, and Architect.
- C. Project meetings and progress meetings will be held in the Project Field Office, or at another location selected by the Construction Manager when deemed necessary.

**1.02 TRAILERS, ETC.**

- A. Trailers to be used as Contractors' site office and storage will be permitted. Approval must be obtained from the Field Construction Manager prior to moving on-site and will be located as directed by the Construction Manager. All trailers must meet federal, state, and local electrical and fire codes.

**END OF SECTION 01590**

**PART 1 – GENERAL**

**1.01 NEW MATERIAL AND EQUIPMENT**

- A. Material and equipment incorporated into the Work shall:
1. Conform to applicable specification and standards,
  2. Comply with sizes, makes, types, and qualities specified or as specifically approved in writing by the Architect or Owner.
- B. Manufactured and Fabricated Products:
1. Design, fabricate and assemble in accord with the best engineering and shop practices.
  2. Manufacture like parts of duplicate units to standard sizes and gauges, to be interchangeable.
  3. Two or more items of the same kind shall be identical, by the same manufacturer.
  4. Products shall be suitable for service conditions.
  5. Equipment capacities, sizes, and dimensions shown or specified shall be adhered to, unless variations are specifically approved in writing by the Project Architect.
- C. Do not use material or equipment for any purpose other than that for which it is designed or is specified.

**1.02 MANUFACTURERS INSTRUCTIONS**

- A. When the Contract Documents require that installation comply with manufacturers' printed instructions, obtain and distribute copies of such instructions to parties involved in the installation, including two (2) copies to the Project Architect.
- B. Maintain one set of complete instructions at the site during installation, until project completion.
- C. Handle, install, connect, clean, condition and adjust products in strict accord with such instructions and in conformity with specified requirements.
1. Should job conditions or specified requirements conflict with manufacturers' instructions, consult with the Project Team for further instructions.
- D. Perform Work in accord with manufacturers' instructions. Do not omit any preparatory step or installation procedure unless specifically modified or exempted by the Contract Documents.

**1.03 TRANSPORTATION AND HANDLING**

- A. Arrange deliveries of products in accordance with the Short-Term Construction Activities Plan. Coordinate to avoid conflict with Work and conditions at the site.
1. Deliver products in undamaged condition, in manufacturers' original containers or packaging, and with identifying labels intact and legible.
  2. Immediately upon delivery, inspect shipments to assure compliance with the requirements of the Contract Documents and approved submittals, and to ensure that products are properly protected and undamaged.
- B. Provide equipment and personnel to handle products by methods which will prevent soiling or damage to products or packaging.

**1.04 STORAGE AND PROTECTION**

- A. Store products in accord with manufacturers' instructions, with seals and labels intact and legible.
  - 1. Store products subject to damage by the elements in weather tight enclosures.
  - 2. Maintain temperature and humidity within the ranges required by Manufacturers' instructions.
- B. Arrange storage in a manner to provide easy access for inspection. Make periodic inspections of stored products to assure that the products are maintained under specific conditions and are free from damage or deterioration.
- C. Protection after Installation:
  - 1. Provide substantial coverings as necessary to protect installed products from damage, traffic, and subsequent construction operations. Remove the coverings when they are no longer needed.

**1.05 SUBSTITUTIONS AND PRODUCT OPTIONS**

- A. Products List:
  - 1. Before commencing Work, submit to the Construction Manager a complete list of major products proposed to be used, with manufacturers and suppliers' names, product names, model numbers, and where applicable, names of installing subcontractors. (Refer to Section 00680.)
- B. Contractor's Options:
  - 1. For products specified only by reference standard, select any product meeting that standard.
  - 2. For products specified by naming several products or manufacturers, select any one of the products or manufacturers named, which complies with the specifications.
  - 3. For products specified by naming one or more products or manufacturer and "or equal," Contractors must submit requests for substitutions for any product or manufacturer not specifically names.
  - 4. For products specified by naming only one product and manufacturer, there is no option.
- C. Substitutions:
  - 1. The Project Team will consider written requests from Contractors for substitution of products.
  - 2. Submit a separate request for each product, supported with complete data, with drawings and samples, as appropriate, including:
    - a. Comparison of the qualities of the proposed substitution with that specified,
    - b. Changes required in other elements of the Work because of the substitution,
    - c. Effect on the construction schedule,
    - d. Cost data comparing the proposed substitution with the product specified,
    - e. Any required license fees or royalties,
    - f. Availability of maintenance service, and source of replacement materials.
  - 3. Architect will be the judge of the acceptability of all proposed substitutions.
  - 4. Any request for a substitution constitutes a representation that the Contractor:
    - a. Has investigated the proposed product and determined that it is equal to or superior in all respects to that specified,
    - b. Will provide the same warranties or bonds for the substitution as for the product specified,
    - c. Will coordinate the installation of accepted substitutions into the Work, and make such other Changes as may be required to make the Work complete in all respects,
    - d. Waivers all claims for additional costs which may subsequently become apparent.
  - 5. The Construction Manager will review requests for substitutions and the Architect's determination of acceptability with reasonable promptness and will notify Contractors in writing of his decisions regarding requested substitutions.

**END OF SECTION 01600**

**PART 1 – GENERAL**

**1.01 DESCRIPTION**

- A. Each Contractor shall comply with requirements stated in the General Conditions and in the Specifications for procedures in closing out the Work.

**1.02 SUBSTANTIAL COMPLETION AND FINAL INSPECTION PROCEDURE**

- A. When a Contractor's work is 98% complete, and in compliance with Section 10 "Completion" of the Contract, the Contractor will be provided with a Certificate of Substantial Completion, after proper certification by the Construction Manager and Architect. A list of Work in need of correction and a list of incomplete Work will be forwarded to the Contractor. Both the Construction Manager and the Architect will have input to each list.
- B. Each Contractor will be allowed two weeks to complete the items on both lists beginning from the date stipulated on the Certification of Substantial Completion. The Contractor shall begin completion and correction activities within seven (7) days of receipt of the lists and complete all activities within the two-week period specified. Contractors failing to perform in accord with these time parameters will be subject to the provisions of the Additional Conditions, and the Owner will have the right to carry out the corrective Work and/or complete the Work. The cost of correction or completion will be deducted from the Contractor's contract amount.
- C. By the act of submitting the Certificate of Substantial Completion for execution by the Construction Manager and the Architect, the Contractor represents that they have:
1. Reviewed the Contract Documents.
  2. Inspected their Work for compliance with the Contract Documents.
  3. Completed their Work in accord with the Contract Documents and all pertinent submittals.
- D. They further represent that:
1. Equipment and systems have been tested in the presence of the Owner's representative and are operational.
  2. Their Work is completed and ready for final inspection.

**1.03 CONTRACTOR'S CLOSEOUT DOCUMENTS**

- A. Upon Substantial Completion, the Contractor shall submit the following:
1. Evidence of compliance with requirements of governing authorities, including Certificates of Inspection.
  2. Operating and Maintenance Data, Product Data and Instructions to the Owner's personnel.
  3. Warranties and Bonds
  4. Spare Parts and Maintenance Materials
  5. Evidence of Payment and Release of Liens
  6. Certification of Substantial Completion.
  7. As Built Drawings
  8. Contractor Hazardous Materials Compliance Affidavit
  9. Asbestos Free Affidavit
  10. Letter from Contractor's Insurance carrier that a Certificate of Insurance shall be sent to the Construction Manager at renewal time for a two (2) year period after substantial completion.
- B. One (1) hard copy set along with one (1) electronic set of closeout documents shall be submitted to the Construction Manager upon Substantial Completion.

- C. All Close Out documents must be turned in within two weeks of substantial completion. Final payment to the contractor will not be released until all closeout documents have been received and approved and/or punch list items have been completed and signed off.

**1.04 FINAL APPLICATION FOR PAYMENT**

- A. Each Contractor shall submit the final Application for Payment in accord with the procedures and requirements stated in the General Conditions of the Contract for Construction.
- B. Refer to Sections 01720, 01730, and 01740 for further information regarding submittals.

**END OF SECTION 01700**

**PART 1 – GENERAL**

**1.01 DESCRIPTION**

- A. Each Contractor shall execute cleaning during the progress of the Work, and at completion of the Work, as required by the Additional Conditions and the Specifications.

**1.02 DISPOSAL REQUIREMENTS**

- A. Conduct cleaning and disposal operation to comply with codes, ordinances, regulations, and anti-pollution law.

**PART 2 – PRODUCTS AND EQUIPMENT**

**2.01 MATERIALS**

- A. Use only those cleaning materials which will not create hazards to health or property, and which will not damage surfaces.
- B. Use only those cleaning materials and methods recommended by the manufacturer of the surface material to be cleaned.
- C. Use cleaning materials only on surfaces recommended by the cleaning material manufacturer.
- D. Each Contractor shall provide his/her own cleaning equipment.
- E. Each Contractor shall cooperate with the Owner and the Construction Manager regarding clean up.

**PART 3 – EXECUTION**

**3.01 HOUSEKEEPING AND CLEAN-UP**

- A. Each Contractor shall execute daily housekeeping to keep their Work, the site, and adjacent properties free from accumulations of waste materials, rubbish, and windblown debris resulting from construction operations.
- B. Each Contractor is financially responsible for his/her clean-up operations. Clean up must be timely as well as thorough in order to meet safety regulations and permit other Contractors to perform without hindrance from dirt and debris. The Construction Manager will coordinate Project housekeeping and take appropriate steps to maintain clean, safe working conditions. **Contractors failing to meet housekeeping requirements will be charged for services arranged by the Construction Manager.**

**3.02 DUST CONTROL**

- A. Clean interior spaces prior to the start of finish painting and continue cleaning on an as-needed basis until painting is finished.
- B. Schedule operations so that dust and other contaminants resulting from the cleaning process will not fall on wet or newly coated surfaces.
- C. Clean up must be performed after each task is done.
- D. Each Contractor is responsible for developing a plan for dust control and debris removal for each task prior to starting.

**3.03 FINAL CLEANING**

- A. Each Contractor shall employ qualified people for cleaning.
- B. Installing Contractors shall remove grease, mastic adhesives, dust, dirt, stains, finger-paints, labels, and other foreign materials from exposed interior and exterior surfaces, for acceptance by the Construction Manager, prior to leaving the site.
- C. Prior to final completion or Owner occupancy, each Contractor shall conduct an inspection of exposed interior and exterior surfaces and all work areas, to verify that the entire Project is clean.

**END OF SECTION 01710**



**PART 1 – GENERAL**

**1.01 DESCRIPTION**

- A. The Construction Manager will make available a set of Record Documents of the following:
1. Drawings.
  2. Specifications.
  3. Addenda.
  4. Change Orders and other Modifications to the Contracts.
  5. Written Instructions.
  6. Approved Shop Drawings, Product Data and Samples.
  7. Field Test Records.
  8. Construction Photographs.

**1.02 RECORD DRAWINGS**

- A. As a condition of final payment, each Contractor shall mark any and all installation information that differs in location, size, dimension or type from that shown on the Construction Documents on a single set of Construction Documents. Location of items of work such as electrical conduits, junction boxes, fire alarm cable, data cable, etc., that are not specifically shown on the Construction Documents shall be included in the Record Drawings. Locations of all work installed under concrete slabs shall be noted with accurate dimensions and the depth below finish floor indicated.

**1.03 SUBMITTAL**

- A. At Contract Closeout, each Contractor shall deliver one (1) hard set along with (1) electronic set of Record Documents, as indicated in 01700.1.03B to the Construction Manager, for delivery to the Owner.
- B. Each Contractor shall accompany their Record Document submittal with a transmittal letter in duplicate, containing:
1. Date.
  2. Project and Phase Designation.
  3. Contractor's name and address.
  4. Bid Division name and number.
  5. Title and number of each Record Document.
  6. Signature of Contractor of his authorized representative.
- D. The receipt of such Record Documents by the Construction Manager or the Owner shall not be a waiver of any deviations from the Contract Documents.

**END OF SECTION 01720**

**PART 1 – GENERAL**

**1.01 DESCRIPTION**

- A. Each Contractor shall compile product, data, and related information appropriate to the Owner’s maintenance and operation of products furnished under their contract.
- B. Each Contractor shall instruct the Owner’s personnel in the maintenance of products and in the operation of equipment and systems.

**1.02 MAINTENANCE AND OPERATING MANUALS**

- A. Prior to Substantial Completion, each Contractor shall submit to the Construction Manager one (1) hard set along with one (1) electronic set of all comprehensive maintenance and operating materials, presenting complete directions and recommendations for the proper care and maintenance of all visible surfaces, as well as maintenance and operating instructions for all equipment items which the Contractor has provided or installed.
- B. Operating instructions shall include all necessary printed directions for correct operation, adjustment, servicing, and maintenance of movable parts. Also included shall be suitable parts lists and diagrams showing parts location and assembly.

**1.03 INSTRUCTION OF OWNER’S PERSONNEL**

- A. Prior to final inspection or acceptance, each Contractor shall fully instruct the Owner’s designated operating and maintenance personnel in the operation, adjustment, and maintenance of all products, equipment, and systems.
- B. Manufacturer’s operating and maintenance manuals shall constitute the basis of instruction. Each Contractor shall review the contents of such manuals with the Owner’s personnel in full detail to explain all aspects of operation and maintenance.

**END OF SECTION 01730**

**PART 1 – GENERAL**

**1.01 DESCRIPTION**

- A. The Contractor shall provide a written Guarantee for all labor, material, equipment, and workmanship for a minimum period of two (2) years from the date of Substantial Completion of the project (or longer period if stipulated in the specifications) covering the work of their entire Bid Division(s).
- B. The Contractor shall also provide a written Warranty covering all work of their entire Bid Division(s) for a minimum period of two (2) years from the date of final project completion (or longer period if stipulated in the specifications).
- C. The Contractor shall further provide all suppliers, manufacturer, subcontractor and other written guaranties and warranties covering the work of the entire Bid Division(s) as required by the project specifications.

**1.02 REQUIREMENTS**

- A. The Contractor shall provide one (1) hard copy along with one (1) electronic copy of all written Guaranties and Warranties.
- B. The Contractor shall review all guaranties and warranties to assure of their compliance with all conditions of the contract.
- C. The Contractor shall assemble all guaranties and warranties, fully executed by each respective contractor, supplier, manufacturer and subcontractor and submit to the construction manager within two weeks of the date of Substantial Completion of the project.
- D. If the Owner elects to permit equipment and component parts of equipment into service during the progress of construction and has issues such permission in writing, all such guaranties and warranties must be submitted to the construction manager within two weeks after inspection and acceptance.
- E. For items of work where acceptance is delayed materially beyond the Date of Substantial Completion, the Contractor shall provide revised guaranties and warranties listing the acceptance date as the start of the guaranty or warranty period.

**END OF SECTION 01740**

**PART 1 – GENERAL**

**1.01 DESCRIPTION**

- A. It shall be the Contractor's responsibility to ensure that the Owner is notified of any hazardous materials brought to the site.
- B. In compliance with Michigan State Law there is to be no smoking anywhere on the project site or owner's property or use of any tobacco product at any time.
- C. The Contractor agrees to disallow any known carcinogens to be brought onto the jobsite at any time.
- D. The Contractor will not permit any employee to be in possession of any firearm or ammunition when on school property either on the worker's person or in the worker's vehicle. It is illegal to possess firearms or ammunition on your person or in a vehicle on school property at any time.

**1.02 REQUIREMENTS**

- A. The Contractor shall provide:
  - 1. One (1) hard copy of each Safety Data Sheet (SDS) for each of the hazardous materials used on the site.
  - 2. Certification that the Contractor (and their subcontractors) has instructed the persons using the hazardous materials in their proper use.
  - 3. For removal of any unused hazardous materials in their proper use.
  - 4. Certification that no asbestos containing materials are being used or brought onto the site by signing and notarizing the asbestos free certificate, which follows as page 3 of this Section.
- B. The Contractor shall utilize employee(s) that have been trained and certified for Hazardous Material Awareness specifically for asbestos and lead awareness.
- C. The Contractor has the responsibility to make themselves, their employees, and their subcontractors aware of any hazardous materials in the area of their specified work.
- D. The above requirements must be fulfilled, in writing, at or prior to a pre-construction meeting by filling out the Contractor Hazardous Materials Compliance Form, which is page 2 of this section.
- E. Standard safety practices and regulations as supplied by all governmental agencies will be in effect.
- F. A list of districts SDS sheets is available on request.
- G. The Contractor shall submit a completed Contractor Hazardous Materials Compliance Affidavit and Asbestos-Free Affidavit certifying that no hazardous material has been incorporated into the Project as part of the documentation for Contract Close-Out.

**2.01 COMPLIANCE**

- A. Compliance with EPA AHERA for Asbestos.
  - 1. The Contractor must adhere to all EPA AHERA and Michigan State Asbestos Regulations for asbestos and other hazardous materials.

B. Compliance with Lead-Containing Materials.

1. All Contractors, Subcontractors and Sub-subcontractors shall adhere to the Environmental Protection Agency (EPA) lead-based paint regulation titled the "Renovation, Repair and Painting (RRP) Rule". Included under this law are "Child Occupied Facilities" (COFs). COFs encompass locations of a pre-1978 constructed buildings where children under age of six (6) regularly visit, such as kindergarten rooms, 1st grade classrooms, applicable restrooms, preschools and day care centers. Therefore portions of each pre-1978 constructed school building falls under the RRP Rule.
2. Any contractor working on this project who disturbs painted surfaces in COF spaces shall ensure that they adhere to all aspects of the RRP Rule. This includes but is not limited to meeting the requirements for being a Certified Firm, having a Certified Lead Renovator involved and following applicable lead safe work practices.
3. Furthermore, all Contractors shall be responsible to comply with all applicable Federal and Michigan State lead regulations including, but not limited to, 29 CFR Part 1926.62 of the OSHA Lead Construction Standard, (Part 603 of the Michigan State Standards). All costs associated with regulatory compliance shall be borne by the Contractor.

**CONTRACTOR HAZARDOUS MATERIALS COMPLIANCE AFFIDAVIT**

PROJECT NAME: \_\_\_\_\_

TITLE: \_\_\_\_\_

Contractor: \_\_\_\_\_

Address: \_\_\_\_\_

Contractor's Representative: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Job Location: \_\_\_\_\_

This document certifies that the Contractor and any subsequent Contractors have complied with the terms set forth in the requirements for **Bay City Public Schools** as they pertain to hazardous materials.

The SDS's are attached for all hazardous materials which will be brought to **Bay City Public Schools**.

There are \_\_\_\_\_ SDS's attached.

The Contractor's employees (including subcontractors) have received appropriate instructions pertaining to the use and handling of hazardous materials.

The Contractor has been informed of hazardous materials in the area of the specified work.

\_\_\_\_\_  
Signature of Contractor's Representative

Date: \_\_\_\_\_

Received by: \_\_\_\_\_

Date: \_\_\_\_\_

**ASBESTOS FREE AFFIDAVIT**

Contractor: \_\_\_\_\_

Company Name: \_\_\_\_\_

Street: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Project: \_\_\_\_\_

Bid Division: \_\_\_\_\_

Name of Building(s) in which work was performed:

\_\_\_\_\_  
\_\_\_\_\_

Certificate Statement:

I \_\_\_\_\_, representing and having authority for  
\_\_\_\_\_, hereby certify that any and all products/materials  
that will be or have been installed/introduced in the above mentioned buildings, are asbestos free or less  
that one percent (1%) asbestos by weight.

Name (printed): \_\_\_\_\_ Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Notary Public: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_

**END OF SECTION 01800**

**PART 1 – GENERAL**

**1.01 NOTICE**

- A. This notice is to formally advise you, per AHERA Requirements, that all buildings may have asbestos containing materials present. All areas testing positive for asbestos are documented in booklets located in the **Bay City Public Schools**.

**1.02 DESCRIPTION**

- A. All thermal insulation such as pipe wrap, especially joints, should be assumed to contain asbestos. Contractors are cautioned not to attempt removal of these materials without first notifying the Owner.



# AHERA Notification and Contractor Compliance Affidavit

**Project Name:** Bay City Public Schools – 2024 Sinking Fund Bid Pack 11 Eastern HS at Handy MS  
**Project #:** Job Number  
**Owner:** Bay City Public Schools  
**Address:** 601 Blend Street, Bay City, MI 48706

**This notice is to formally advise you, per AHERA Requirements, that all buildings may have existing asbestos containing materials. All areas testing positive for asbestos have been documented in the owner’s asbestos inspection report available for inspection at the owner’s main office. All areas currently testing positive for asbestos are documented in the attached Three-Year Re-Inspection Asbestos plan report that has been provided by: Bay City Public Schools.**

**All thermal insulation such as pipe wrap, especially joints, should be assumed to contain asbestos. Contractors are cautioned not to attempt removal of these materials without first notifying the Owner.**

**I / We \_\_\_\_\_ doing business as \_\_\_\_\_ acknowledge receipt of the Three Year Re-Inspection Asbestos plan for the above mentioned project(s) as provided by Bay City Public Schools and certify that all employees of this contractor shall have been trained in the MIOSHA Two-Hour Asbestos Awareness program. It is this Contractor’s responsibility to inform any subcontractors or suppliers of this information and assume all responsibility for such notification.**

\_\_\_\_\_  
Company

State of \_\_\_\_\_ County of \_\_\_\_\_

\_\_\_\_\_  
Name

Subscribed and sworn to before me this \_\_\_\_\_

day of \_\_\_\_\_

\_\_\_\_\_  
Title

Notary Public: \_\_\_\_\_

\_\_\_\_\_  
Address

My Commission Expires: \_\_\_\_\_

\_\_\_\_\_  
City, State, Zip

\_\_\_\_\_  
Seal

**END OF SECTION 01805**

**NOVA**  
**ENVIRONMENTAL, INC.**  
5300 PLYMOUTH ROAD  
ANN ARBOR, MICHIGAN 48105  
734-930-0995

December 1, 2021

Mr. Patrick Tobin  
Director of Athletics, Facilities and Maintenance  
Bay City Public Schools  
1624 Columbus Avenue  
Bay City, MI 48708

Dear Mr. Tobin:

The following is the 2021 Three-Year Reinspections for Bay City Eastern School. This Reinspection was conducted in accordance with 40 CFR, Part 763.85(b), of the Asbestos Hazard Emergency Response Act (AHERA).

If you have any questions regarding the Reinspection Report or if I can be of further assistance, please contact me at (734) 930-0995.

Sincerely,

NOVA ENVIRONMENTAL, INC.



Lisa Whitton  
Vice President

LW/ab

Enclosures

Nova Environmental, Inc.  
Reinspection Form

**Client:** Bay City Public Schools

**Date of Reinspection:** October 13, 2021

**Name of Building:** Bay City Eastern School

**Address:** 201 Woodside Ln., Bay City, MI 48708

This Building has known or assumed:       Friable       Non-Friable

Homogeneous Area(s) of known or assumed ACBM identified in the Management Plan and/or last Reinspection/Surveillance

2021 Reinspection findings for ACBM – Bay City Eastern School – October 13, 2021					Management Planner Recommendations			
HA #	HA Description	F/NF	Previous Assessment	New Assessment	Locations	Assessment Justification	Response	Schedule
	Gaskets	F	ACBM with potential for Damage	ACBM with potential for Damage	Hot Water Storage Tank Valve, Compressor Valve, Pop Up Valve, Gas Regulator Valve	Material is intact	**O & M	Ongoing
	Pipe Fitting Insulation	F	ACBM with potential for Damage	ACBM with potential for Damage	Throughout – Above Ceilings	Material is intact	**O & M	Ongoing
**	Pipe Fitting Insulation	F	ACBM with potential for Damage	Damaged or Significantly Damaged ACBM TSI	North end of the N/S Hall	Material is damaged	Remove/Repair	April 2022
	9” x 9” Floor Tile	NF	*Non-Friable	*Non-Friable	Throughout	Material is intact	**O & M	Ongoing
	Fire Doors	NF	*Non-Friable	*Non-Friable	Throughout	Material is intact	**O & M	Ongoing
**	Fire Doors	NF	ACBM with potential for Damage	ACBM with potential for Damage	Gym Store Room	Material is damaged – Core Exposed	Remove/Repair	April 2022
	“Chem Surf” Countertop	NF	*Non-Friable	*Non-Friable	CR 14	Material is intact	**O & M	Ongoing

\*No assessment necessary for Non-friable materials

\*\*Maintain under an Operation and Maintenance Program

Nova Environmental, Inc.  
Reinspection Form

**Client:** Bay City Public Schools

**Date of Reinspection:** October 13, 2021

**Name of Building:** Bay City Eastern School

**Address:** 201 Woodside Ln., Bay City, MI 48708

This Building has known or assumed:  Friable  Non-Friable

Homogeneous Area(s) of known or assumed ACBM identified in the Management Plan and/or last Reinspection/Surveillance

2021 Reinspection findings for ACBM – Bay City Eastern School – October 13, 2021							Management Planner Recommendations		
HA #	HA Description	F/NF	Previous Assessment	New Assessment	Locations	Assessment Justification	Response	Schedule	
	Plasterboard	NF	*Non-Friable	*Non-Friable	Original Building & 1985 Addition	Material is intact	**O & M	Ongoing	
	Brown Vinyl Baseboard	NF	*Non-Friable	*Non-Friable	Original Building	Material is intact	**O & M	Ongoing	
	Grey Door Liner	NF	*Non-Friable	*Non-Friable	Original Building	Material is intact	**O & M	Ongoing	
	Vinyl Room Divider Strip	NF	*Non-Friable	*Non-Friable	Original Building	Material is intact	**O & M	Ongoing	
	Room Dividers	NF	*Non-Friable	*Non-Friable	Original Building	Material is intact	**O & M	Ongoing	
	Black Vinyl Window Liner	NF	*Non-Friable	*Non-Friable	Original Building	Material is intact	**O & M	Ongoing	
	Weather Stripping	NF	*Non-Friable	*Non-Friable	Original Building	Material is intact	**O & M	Ongoing	
	Wallpaper	NF	*Non-Friable	*Non-Friable	Original Building & 1985 Addition	Material is intact	**O & M	Ongoing	

\*No assessment necessary for Non-friable materials

\*\*Maintain under an Operation and Maintenance Program

Nova Environmental, Inc.  
Reinspection Form

**Client:** Bay City Public Schools

**Date of Reinspection:** October 13, 2021

**Name of Building:** Bay City Eastern School

**Address:** 201 Woodside Ln., Bay City, MI 48708

This Building has known or assumed:       Friable       Non-Friable

Homogeneous Area(s) of known or assumed ACBM identified in the Management Plan and/or last Reinspection/Surveillance

2021 Reinspection findings for ACBM – Bay City Eastern School – October 13, 2021		Management Planner Recommendations						
HA #	HA Description	F/NF	Previous Assessment	New Assessment	Locations	Assessment Justification	Response	Schedule
	Phone & Electric wiring insulation	NF	*Non-Friable	*Non-Friable	Original Building	Material is intact	**O & M	Ongoing
	Plaster	NF	*Non-Friable	*Non-Friable	1985 Addition	Material is intact	**O & M	Ongoing
	6" Black Vinyl Baseboard	NF	*Non-Friable	*Non-Friable	1985 Addition	Material is intact	**O & M	Ongoing

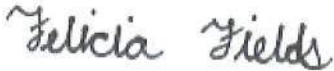

\*No assessment necessary for Non-friable materials

\*\*Maintain under an Operation and Maintenance Program

**NOVA ENVIRONMENTAL, INC.**

Accredited Inspector/Management Planner Information  
Inspection and Assessment


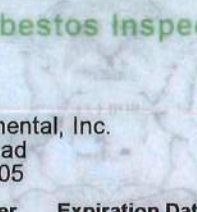

This form provides the information for Inspectors/Management Planners, which is required to perform Reinspections, in accordance with 40 CFR, Part 763.85(b),(vii),(A) and (C).

1. **Date(s) of Reinspection:** October 13, 2021
2. **Name of Accredited Inspector(s) performing Reinspection and Assessments:**  
Felicia Fields
3. **Signature(s) of Accredited Inspector(s) performing Reinspection and Assessments:**  

4. **Name of Accredited Management Planner(s) who performed the Reinspection and Assessments:**  
Lisa Whitton
5. **Signature of Accredited Management Planner(s) who performed the Reinspection and Assessments:**  
  
-
6. **State of Accreditation:** Michigan/Michigan
7. **Accreditation Number:** A53464/A30431
8. **Training Institute:** Nova Environmental, Inc.
9. **Certificate Expiration:** August 27, 2022/ August 27, 2022
10. **Building Name and Address:**  
Bay City Eastern School  
201 Woodside Ln.,  
Bay City, MI 48708

**Note:** Copy(s) of current Michigan Department of Licensing & Regulatory Affairs Accreditation Cards attached for each Accredited Inspector performing Reinspection and Assessments.

*State of Michigan*  
 Department of Labor and Economic Opportunity  
 Michigan Occupational Safety & Health Administration - Asbestos Program

**Asbestos Inspector**

**Lisa L. Whitton**  
 c/o Nova Environmental, Inc.  
 5300 Plymouth Road  
 Ann Arbor, MI 48105

**Accreditation Number**      **Expiration Date**  
 A30431                              10/11/2022

DOB: 11/18/1981

This individual has satisfactorily met or exceeded the requirements of Michigan Public Act 440 of 1988, as amended, to be accredited as an Asbestos Inspector.

Accreditation card is not valid if altered.      154434

*State of Michigan*  
 Department of Labor and Economic Opportunity  
 Michigan Occupational Safety & Health Administration - Asbestos Program

**Asbestos Management Planner**





**Lisa L. Whitton**  
 c/o Nova Environmental, Inc.  
 5300 Plymouth Road  
 Ann Arbor, MI 48105

**Accreditation Number**      **Expiration Date**  
 A30431                              10/11/2022




DOB: 11/18/1981

This individual has satisfactorily met or exceeded the requirements of Section 206 of the Toxic Substances Control Act to be accredited in the above discipline.

Accreditation card is not valid if altered.      154435

*State of Michigan*  
 Department of Labor and Economic Opportunity  
 Michigan Occupational Safety & Health Administration - Asbestos Program

**Asbestos Project Designer**

**Lisa L. Whitton**  
 c/o Nova Environmental, Inc.  
 5300 Plymouth Road  
 Ann Arbor, MI 48105

**Accreditation Number**      **Expiration Date**  
 A30431                              10/11/2022


DOB: 11/18/1981


This individual has satisfactorily met or exceeded the requirements of Section 206 of the Toxic Substances Control Act to be accredited in the above discipline.

Accreditation card is not valid if altered.      154433

*State of Michigan*  
Department of Labor and Economic Opportunity  
Michigan Occupational Safety & Health Administration - Asbestos Program

**Asbestos Inspector**

 **Felicia F. Fields**  
c/o Nova Environmental, Inc.  
5300 Plymouth Road  
Ann Arbor, MI 48105



**Accreditation Number** **A53464**      **Expiration Date** **10/11/2022**      **DOB: 03/20/1993**

This individual has satisfactorily met or exceeded the requirements of Michigan Public Act 440 of 1988, as amended, to be accredited as an Asbestos Inspector.

Accreditation card is not valid if altered      **154117**



**NOVA ENVIRONMENTAL, INC.**

Designated Person Information Sheet

1. **Name of Designated Person:**

Mr. Patrick Tobin

2. **Professional Title of Designated Person:**

Director of Athletics, Facilities, and Maintenance

3. **Address of Designated Person:**

1624 Columbus Avenue  
Bay City, MI 48708

4. **Telephone Number of Designated Person:**

(989) 686-8371

The intent of this statement is to certify that the Three-Year Reinspection with the AHERA regulation, has been conducted by Accredited persons. This statement also certifies that I have reviewed the new Accredited Management Planner's Response Action Recommendations and Response Action Schedules, and approve them for implementation.

5. **Signature of Designated Person:**

---

6. **Date of Signature:**

---

**PART 1 – GENERAL**

**1.01 CODES**

- A. All work shall comply with the applicable requirements of the local building code and accident and fire prevention regulations.

**1.02 SCOPE**

- A. The Work covered by this section of Specifications includes, but is not limited to, the following:
1. Demolish and remove existing materials as shown on the plan and noted in the Description of Work.
  2. Cover holes and other hazardous openings with approved materials and barriers.
  3. Remove all demolition materials and debris from the construction site and dispose of in a legal manner.
  4. Protect adequately the construction site, adjoining property, and utility services as work proceeds through all stages.

**1.03 QUALITY ASSURANCE**

- A. The contractor's staff responsible for demolition shall be experienced in this type of work. Equipment is to be of suitable type, in good working condition, and operated by skilled mechanics.

**PART 2 – PRODUCTS**

**2.01 TEMPORARY ENCLOSURES**

- A. Provide temporary enclosures to prevent dust from entering other parts of the facility during demolition. Furnish, install, and remove when directed, temporary weathertight enclosures in all exterior openings created during demolition by the contractor.

**PART 3 – EXECUTION**

**3.01 GENERAL INSTRUCTIONS**

- A. All work shall be done in a safe and cautious manner in order to avoid accidents and property damage.
- B. Protect the work scheduled to remain, and if damaged, repair to match existing work.
- C. All salvaged material unless otherwise noted on plans or in the Description of Work shall become the property of the Contractor and shall be evaluated in the Contractor's bid price. Promptly remove salvaged material from the construction site as the work proceeds.
- D. Carefully dismantle and store on site all material scheduled to remain the Property of the Owner. Protect until removed by the Owner or until end of Contract.
- E. Protect from damage and clean materials scheduled to be reused.
- F. Protect parts of the existing Work scheduled to remain. Cut away carefully the parts to be demolished to reduce the number of necessary repairs.
- G. Support existing structure as needed during cutting of new openings or replacement of structural members.
- H. Prevent accumulation of debris and overloading of any part of the structure.
- I. Prevent access of unauthorized persons to partly demolished areas.
- J. Remove all demolition materials, debris, and rubbish from the site as soon as practicable. Do not permit any accumulation on the site. Transport all demolition materials without spillage on the streets.

**END OF SECTION 001900**

SECTION 000110 - TABLE OF CONTENTS

**Division      Section Title**

**SERIES 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS**

000110      TABLE OF CONTENTS  
000115      LIST OF DRAWING SHEETS  
005000      ELECTRONIC FILES

**DIVISION 01 - GENERAL REQUIREMENTS**

012300      ALTERNATES  
013300      SUBMITTAL PROCEDURES

**DIVISION 02 - EXISTING CONDITIONS**

024119      SELECTIVE DEMOLITION

**DIVISION 03 - CONCRETE**

033000      CAST IN PLACE CONCRETE

**DIVISION 04 - MASONRY**

042000      UNIT MASONRY

**DIVISION 05 - METALS**

054000      COLD FORMED METAL FRAMING  
055000      METAL FABRICATIONS

**DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES**

061053      MISCELLANEOUS ROUGH CARPENTRY  
062023      INTERIOR FINISH CARPENTRY  
064116      PLASTIC-LAMINATE CLAD ARCHITECTURAL CABINETS

**DIVISION 07 - THERMAL AND MOISTURE PROTECTION**

079200      JOINT SEALANTS

**DIVISION 08 - DOORS AND WINDOWS**

081113      HOLLOW METAL DOORS AND FRAMES  
081416      FLUSH WOOD DOORS  
087100      DOOR HARDWARE  
088000      GLAZING

**DIVISION 09 - FINISHES**

092216      NON-STRUCTURAL METAL FRAMING

TABLE OF CONTENTS

000110-1

092900 GYPSUM BOARD  
093013 CERAMIC TILING  
095113 ACOUSTICAL PANEL CEILINGS  
096513 RESILIENT BASE AND ACCESSORIES  
096519 RESILIENT TILE FLOORING  
096813 TILE CARPETING  
099123 INTERIOR PAINTING

**DIVISION 10 - SPECIALTIES**

102113.19 SOLID POLYMER TOILET COMPARTMENTS  
102800 TOILET ROOM ACCESSORIES  
105113 METAL LOCKERS  
107313 AWNINGS

**DIVISION 11 - EQUIPMENT**

NOT APPLICABLE

**DIVISION 12 - FURNISHINGS**

NOT APPLICABLE

**DIVISION 13 - SPECIAL CONSTRUCTION**

NOT APPLICABLE

**DIVISION 14 - CONVEYING SYSTEMS**

NOT APPLICABLE

**DIVISION 21 - FIRE SUPPRESSION**

NOT APPLICABLE

**DIVISION 22 - PLUMBING**

NOT APPLICABLE

**DIVISION 23 - HEATING, VENTILATING AND AIR CONDITIONING**

NOT APPLICABLE

**DIVISION 26, 27 AND 28 - ELECTRICAL**

NOT APPLICABLE

**DIVISION 31 - EARTHWORK**

NOT APPLICABLE

**DIVISION 32 - EXTERIOR IMPROVEMENTS**

TABLE OF CONTENTS

000110-2

RENOVATION FOR BCPS  
BAY CITY EASTERN HIGH SCHOOL AT HANDY M.S.  
BAY CITY, MICHIGAN

PROJECT NO. 2018040.16

NOT APPLICABLE

**DIVISION 33 - UTILITIES**

NOT APPLICABLE

**DIVISION 34 - TRANSPORTATION**

NOT APPLICABLE

**END OF SECTION 000110**

DOCUMENT 000115 - LIST OF DRAWING SHEETS

1.1 DRAWING INDEX:

TS TITLE SHEET

ARCHITECTURAL

A0.01 PROJECT INFORMATION

A2.01 FIRST FLOOR MASTER & ENLARGED CODE PLAN

A2.11 FIRST FLOOR DEMOLITION PLAN - UNIT 'A', 'F' & 'G'

A2.12 FIRST FLOOR DEMOLITION PLAN - UNIT 'G'

A2.21 FIRST FLOOR CONSTRUCTION PLAN - UNIT 'A', 'F' & 'G'

A2.22 FIRST FLOOR CONSTRUCTION PLAN - UNIT 'G' & EXT. ELEV.

A3.01 FIRST FLOOR FINISH PLAN - UNIT 'A', 'F' & 'G'

A3.02 FIRST FLOOR FINISH PLAN - UNIT 'G'

A3.03 DOOR & FRAME SCHEDULES, TYPES, AND DETAILS

A6.01 ROOF PLAN

A8.01 INTERIOR ELEVATIONS AND DETAILS

A9.01 FIRST FLOOR REFLECTED CEILING PLAN - UNIT 'F' & 'G'

A9.02 FIRST FLOOR REFLECTED CEILING PLAN - UNIT 'G'

STRUCTURAL

S2.01 ROOF FRAMING PLAN

S3.01 NOTES, SCHEDULES, AND DETAILS

MECHANICAL

M1.01 FIRST FLOOR PLAN UNIT "F" - MECHANICAL AND PLUMBING DEMOLITION

M1.02 FIRST FLOOR PLAN UNIT "G" - MECHANICAL AND PLUMBING DEMOLITION

M2.01 FIRST FLOOR PLAN UNIT "F" - PLUMBING AND HVAC PIPING REVISIONS

M2.02 FIRST FLOOR PLAN UNIT "G" - PLUMBING AND HVAC REVISIONS

M3.01 FIRST FLOOR PLAN UNIT "F" - HVAC

M3.02 ROOF PLAN MECHANICAL REVISIONS

M4.01 MECHANICAL SCHEDULES

M4.02 MECHANICAL SCHEDULES

M5.01 MECHANICAL DETAILS

ELECTRICAL

- E1.01 FIRST FLOOR DEMOLITION PLAN - UNIT 'F' & 'G' - ELECTRICAL
- E1.02 FIRST FLOOR DEMOLITION PLAN - UNIT 'G' - ELECTRICAL
  
- E2.01 FIRST FLOOR DEMOLITION PLAN - UNIT 'F' & 'G' - REVISED LIGHTING
- E2.02 FIRST FLOOR DEMOLITION PLAN - UNIT 'G' - REVISED LIGHTING
- E2.03 FIRST FLOOR DEMOLITION PLAN - UNIT 'F' & 'G' - REVISED POWER AND SYSTEMS
- E2.04 FIRST FLOOR DEMOLITION PLAN - UNIT 'G' - REVISED POWER AND SYSTEMS
- E2.05 ROOF PLAN ELECTRICAL REVISIONS
  
- E3.01 ELECTRICAL INFORMATION
- E3.02 ELECTRICAL PANEL SCHEDULES
  
- E4.01 FIRST FLOOR PLAN -UNIT 'F' & 'G' - REVISED EMERGENCY LIGHTING

END OF DOCUMENT 000115

SECTION 005000 - AVAILABILITY OF ELECTRONIC FILES

PART 1 - GENERAL

1.1 POLICY

- A. As a service to bidders, contractors, subcontractors, vendors, material suppliers and others needing electronic copies of drawing files, the Architect will provide electronic files via file transfer through the Project Website in accordance with the following policy.
1. In accepting and utilizing any drawings or data generated and furnished by WTA Architects, the Receiver agrees that all such electronic files are instruments of service of WTA Architects and its consultants, who shall be deemed the author, and shall retain all common law, statutory law and other rights, without limitation, including copyrights.
  2. The Receiver agrees not to reuse these electronic files, in whole or in part, for any purpose other than for the Project. The Receiver agrees not to transfer these electronic files to others without the prior written consent of WTA Architects or its consultants. The Receiver further agrees that WTA Architects and its consultants shall have no responsibility or liability to Receiver or others for any changes made it shall be the Receiver's responsibility to be aware of changes made by WTA Architects, its consultants or the Owner.
  3. It is further understood and agreed that the undersigned Receiver will hold WTA Architects and its consultants harmless, indemnify and defend WTA Architects and its consultants from all claims, liabilities, losses, etc., including attorney's fees arising out of the use or misuse of the transferred items.
  4. It is understood and agreed that the items transmitted are prepared from electronic files current at the time of preparation. **All files are AutoCAD 2019.** The Receiver will specify on request form if an older version is required.
  5. This information does not waive the need to verify and review current field conditions and the status of Addenda and/or Bulletin documentation.
  6. As a record of information to be transmitted, WTA Architects will prepare a duplicate back-up for its files, which may be electronic or hard-copy.
  7. Compensation for providing this material will be as follows:
    - a. Base Fee of \$250 for 1 to 3 drawings.
    - b. Base Fee of \$500 for 4 to 10 drawings.
    - c. For each additional drawing after 10 the fee is \$40.00 per drawing (i.e. 11 drawings = \$540)
  8. Payment must be provided along with a signed copy of the Release Letter before files will be released.

1.2 REQUEST PROCEDURE

- B. To receive files the attached Release Letter must be completed in full and submitted to the Project Manager at WTA Architects.
1. A signed copy of the Release Letter must be submitted; faxed or emailed copies will be accepted. However, files will not be exchanged until payment has been received.
  2. Upon remittance of the signed Release Letter and Fee, allow five working days for processing.



**Firm Requesting Files:**

Date: \_\_\_\_\_

Name: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

**Re: Letter of Authorization for Electronic File Transfers**

Project Name: \_\_\_\_\_

WTA Project No.: \_\_\_\_\_

Dear Sir:

Per your request, WTA Architects will transmit the requested electronic files via file transfer through the project website upon receipt of this letter with conditions of agreement as stated.

1. In accepting and utilizing any drawings or data generated and furnished by WTA Architects, the Receiver agrees that all such electronic files are instruments of service of WTA Architects and its consultants, who shall be deemed the author, and shall retain all common law, statutory law and other rights, without limitation, including copyrights.
2. The Receiver agrees not to reuse these electronic files, in whole or in part, for any purpose other than for the Project. The Receiver agrees not to transfer these electronic files to others without the prior written consent of WTA Architects or its consultants. The Receiver further agrees that WTA Architects and its consultants shall have no responsibility or liability to the Receiver or others for any changes made it shall be the Contractors responsibility to be aware of changes made by WTA Architects, its consultants or the Owner.
3. It is further understood and agreed that the undersigned will hold WTA Architects and its consultants harmless, indemnify and defend WTA Architects and its consultants from all claims, liabilities, losses, etc., including attorney's fees arising out of the use or misuse of the transferred items.
4. It is understood and agreed that the items transmitted are prepared from electronic files current at the time of preparation. **All files are AutoCAD 2019**, unless requested otherwise.
5. This information does not waive the need to verify and review current field conditions and the status of Addenda and/or Bulletin documentation.
6. As a record of information to be transmitted, we will prepare a duplicate back-up for our files, which may be electronic or hard-copy.
7. Compensation for providing this material will be as follows: Base Fee of \$250 for 1 to 3 drawings and a Base Fee of \$500 for 4 to 10 drawings; for each additional drawing after 10 the fee is \$40.00 per drawing (i.e. 11 drawings = \$540). Payment must be provided along with a signed copy of this form before files will be released. Please remit to WTA Architects and allow five working days for processing.

Fee: \$ \_\_\_\_\_ Drawings: \_\_\_\_\_

Signed: \_\_\_\_\_ Printed Name/Title: \_\_\_\_\_

*To be Completed by WTA Architects, Inc.*

Released (Signed By): _____	WTA Architects, Inc.
Printed Name/Title: _____	Date: _____

END OF SECTION 005000

SECTION 012300 - ALTERNATES

1.1 SCHEDULE OF ALTERNATES

**A. Alternate No. 1**

1. Base Bid: Existing Red lockers to remain.
2. Alternate: Existing Red lockers to be prepped and painted.

**B. Alternate No. 2**

1. Base Bid: Existing Red lockers to remain.
2. Alternate: Existing Red lockers to removed and replaced with new metal lockers.

**C. Alternate No. 3**

1. Base Bid: Existing Mens and Womens toilet rooms to remain as-is.
2. Alternate: Existing Mens and Womens toilet rooms to be remodeled as shown on Drawings. For walls - SGFT walls to be patched with similar SGFT (color not matching) at plumbing locations, prepped and epoxy painted.

**D. Alternate No. 4**

1. Base Bid: Existing Mens and Women's toilet rooms to remain as-is.
2. Alternate: Existing Mens and Womens toilet rooms to be remodeled as shown on Drawings. For walls - Grind off terrazzo cove and provide new ceramic wall tile on ½" tile backer board mechanically fastened to wall. At Urinal wall, include metal furring.

END OF SECTION 012300

## SECTION 013300 - SUBMITTAL PROCEDURES

### PART 1 - GENERAL

#### 1.1 SUMMARY

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

#### 1.2 DEFINITIONS

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

#### 1.3 SUBMITTAL SCHEDULE

- A. Submittal Schedule: Submit, as an action submittal, a list of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect and additional time for handling and reviewing submittals required by those corrections.

#### 1.4 SUBMITTAL FORMATS

- A. Submittal Information: Include information requested in form fields in Newforma Project Center's Submittal page.
- B. Options: Identify options requiring selection by Architect.
- C. Deviations and Additional Information: On each submittal, clearly indicate deviations from requirements in the Contract Documents, including minor variations and limitations; include relevant additional information and revisions, other than those requested by Architect on previous submittals. Indicate by highlighting on each submittal or noting on attached separate sheet.
- D. Electronic Submittals: Prepare submittals as PDF package, incorporating complete information into each PDF file. Name PDF file with submittal number.

#### 1.5 SUBMITTAL PROCEDURES

- A. Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.
  - 1. Web-Based Project Management Software: Prepare submittals in PDF form, and upload to web-based Project management software website. Enter required data in web-based software site to fully identify submittal.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
  - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.

2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
  3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
- C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
  2. Resubmittal Review: Allow 15 days for review of each resubmittal.
- D. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
- E. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- F. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Architect's action stamp.

#### 1.6 SUBMITTAL REQUIREMENTS

- A. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
1. If information must be specially prepared for submittal because standard published data are unsuitable for use, submit as Shop Drawings, not as Product Data.
  2. Mark each copy of each submittal to show which products and options are applicable.
  3. Include the following information, as applicable:
    - a. Manufacturer's catalog cuts.
    - b. Manufacturer's product specifications.
    - c. Standard color charts.
    - d. Statement of compliance with specified referenced standards.
    - e. Testing by recognized testing agency.
    - f. Application of testing agency labels and seals.
    - g. Notation of coordination requirements.
    - h. Availability and delivery time information.
  4. For equipment, include the following in addition to the above, as applicable:
    - a. Wiring diagrams that show factory-installed wiring.
    - b. Printed performance curves.
    - c. Operational range diagrams.
    - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
- B. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
    - a. Identification of products.
    - b. Schedules.
    - c. Compliance with specified standards.
    - d. Notation of coordination requirements.
    - e. Notation of dimensions established by field measurement.
    - f. Relationship and attachment to adjoining construction clearly indicated.



list of assumptions and summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Number each page of submittal.

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

#### 1.7 DELEGATED-DESIGN SERVICES

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

#### 1.8 CONTRACTOR'S REVIEW

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

#### 1.9 ARCHITECT'S REVIEW

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

BAY CITY PUBLIC SCHOOLS- 2018 SINKING FUND  
RENOVATION FOR BAY CITY EASTERN HS AT HANDY  
BAY CITY, MICHIGAN

PROJECT NO. 2018040.16

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013300



SECTION 024119 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
  - 1. Demolition and removal of selected portions of building or structure.
  - 2. Demolition and removal of selected site elements.
  - 3. Salvage of existing items to be reused or recycled.

1.2 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition waste becomes property of Contractor.
- B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of Owner.
  - 1. Carefully salvage in a manner to prevent damage and promptly return to Owner.

1.3 INFORMATIONAL SUBMITTALS

- A. Proposed Protection Measures: Submit report, including Drawings, that indicates the measures proposed for protecting individuals and property for dust control. Indicate proposed locations and construction of barriers.

1.4 CLOSEOUT SUBMITTALS

- A. Inventory of items that have been removed and salvaged.

1.5 FIELD CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
- B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
- C. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- D. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.
  - 1. If suspected hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Hazardous materials will be removed by Owner under a separate contract.
- E. Storage or sale of removed items or materials on-site is not permitted.
- F. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
  - 1. Maintain fire-protection facilities in service during selective demolition operations.
- G. Arrange selective demolition schedule so as not to interfere with Owner's operations.

## 1.6 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials and using approved contractors so as not to void existing warranties.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ASSE A10.6 and NFPA 241.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting selective demolition operations.
- B. Perform an engineering survey of condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during selective building demolition operations.
- C. Inventory and record the condition of items to be removed and salvaged.

### 3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Services/Systems to Remain: Maintain services/systems indicated to remain and protect them against damage.
- B. Existing Services/Systems to Be Removed, Relocated, or Abandoned: Locate, identify, disconnect, and seal or cap off utility services and mechanical/electrical systems serving areas to be selectively demolished.
  - 1. Arrange to shut off utilities with utility companies.
  - 2. If services/systems are required to be removed, relocated, or abandoned, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.
  - 3. Disconnect, demolish, and remove fire-suppression systems, plumbing, and HVAC systems, equipment, and components indicated on Drawings to be removed.
    - a. Piping to Be Removed: Remove portion of piping indicated to be removed and cap or plug remaining piping with same or compatible piping material.
    - b. Piping to Be Abandoned in Place: Drain piping and cap or plug piping with same or compatible piping material and leave in place.
    - c. Equipment to Be Removed: Disconnect and cap services and remove equipment.
    - d. Equipment to Be Removed and Reinstalled: Disconnect and cap services and remove, clean, and store equipment; when appropriate, reinstall, reconnect, and make equipment operational.
    - e. Equipment to Be Removed and Salvaged: Disconnect and cap services and remove equipment and deliver to Owner.
    - f. Ducts to Be Removed: Remove portion of ducts indicated to be removed and plug remaining ducts with same or compatible ductwork material.

- g. Ducts to Be Abandoned in Place: Cap or plug ducts with same or compatible ductwork material and leave in place.

### 3.3 PROTECTION

- A. Temporary Protection: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
- B. Temporary Shoring: Design, provide, and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.
- C. Remove temporary barricades and protections where hazards no longer exist.

### 3.4 SELECTIVE DEMOLITION

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
  - 1. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.
  - 2. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
  - 3. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
  - 4. Maintain fire watch during and for at least 4 hours after flame-cutting operations.
  - 5. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
  - 6. Dispose of demolished items and materials promptly. Comply with requirements in Section 017419 "Construction Waste Management and Disposal."
- B. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
- C. Removed and Salvaged Items:
  - 1. Clean salvaged items.
  - 2. Pack or crate items after cleaning. Identify contents of containers.
  - 3. Store items in a secure area until delivery to Owner.
  - 4. Transport items to Owner's storage area on-site.
  - 5. Protect items from damage during transport and storage.
- D. Removed and Reinstalled Items:
  - 1. Clean and repair items to functional condition adequate for intended reuse.
  - 2. Pack or crate items after cleaning and repairing. Identify contents of containers.
  - 3. Protect items from damage during transport and storage.
  - 4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.
- E. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to

a suitable, protected storage location during selective demolition and reinstalled in their original locations after selective demolition operations are complete.

### 3.5 CLEANING

- A. Remove demolition waste materials from Project site and dispose of them in an EPA-approved construction and demolition waste landfill acceptable to authorities having jurisdiction.
  - 1. Do not allow demolished materials to accumulate on-site.
  - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
  - 3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
  - 4. Comply with requirements specified in Section 017419 "Construction Waste Management and Disposal."
- B. Burning: Do not burn demolished materials.
- C. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 024119

SECTION 033000 - CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes cast-in-place concrete.
- B. Related Sections:
  - 1. Section 024119 "Selective Demolition"
  - 2. Mechanical and Electrical Sections for new utilities requiring slab removal and replacement.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Design Mixtures: For each concrete mixture.

1.3 INFORMATIONAL SUBMITTALS

- A. Material test reports.
- B. Floor surface flatness and levelness measurements.

1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.
  - 1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities."
- B. ACI Publications: Comply with the following unless modified by requirements in the Contract Documents:
  - 1. ACI Building Code (318); Manual of Standard Practice for Detailing (315) for the mixing, fabrication and placement of concrete, reinforcing steel, and accessories.
  - 2. ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."
- C. Preinstallation Conference: Conduct conference at Project site.

PART 2 - PRODUCTS

2.1 FORM-FACING MATERIALS

- A. Smooth-Formed Finished Concrete: Form-facing panels that will provide continuous, true, and smooth concrete surfaces. Furnish in largest practicable sizes to minimize number of joints.

2.2 STEEL REINFORCEMENT

- A. Reinforcing Bars: ASTM A 615 Grade 60 deformed.
- B. Welded Wire Fabric: ASTM A-1064
  - 1. Concrete Slabs on Grade: 6x6 - W1.4xW1.4 WWF unless noted otherwise. Locate in upper 1/3 of slab.

### 2.3 CONCRETE MATERIALS

- A. Cementitious Material: Use the following cementitious materials, of the same type, brand, and source, throughout Project:
  - 1. Portland Cement: ASTM C 150, Type I.
- B. Normal-Weight Aggregates: ASTM C 33, graded.
  - 1. Maximum Coarse-Aggregate Size: 1 inches (25.3 mm) nominal.
  - 2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.
- C. Water: ASTM C 94/C 94M and potable.

### 2.4 VAPOR RETARDERS

- A. Sheet Vapor Retarder: ASTM E 1745, Class B. Include manufacturer's recommended adhesive or pressure-sensitive tape.
- B. Sheet Vapor Retarder: Polyethylene sheet, ASTM D 4397, not less than 10 mils (0.25 mm) thick.

### 2.5 RELATED MATERIALS

- A. Expansion- and Isolation-Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber or ASTM D 1752, cork or self-expanding cork.

### 2.6 CONCRETE MIXTURES

- A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, according to ACI 301.
- B. Cementitious Materials: Use fly ash, pozzolan, ground granulated blast-furnace slag, and silica fume as needed to reduce the total amount of portland cement, which would otherwise be used, by not less than 40 percent.
- C. Proportion normal-weight concrete mixture as follows:
  - 1. Minimum Compressive Strength at 28 days
    - a. Concrete Slabs on Grade  $f'c = 3500$  psi
  - 2. Maximum Water-Cementitious Materials Ratio:
    - a.  $f'c = 3500$  psi 0.62 non-air entrained
- D. Slump Limits:
  - 1. Slabs and walls: 4"

### 2.7 FABRICATING REINFORCEMENT

- A. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

### 2.8 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94/C 94M and ASTM C 1116/C 1116M, and furnish batch ticket information.
  - 1. When air temperature is between 85 and 90 deg F (30 and 32 deg C), reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F (32 deg C), reduce mixing and delivery time to 60 minutes.

### PART 3 - EXECUTION

#### 3.1 FORMWORK

- A. Form all concrete.
- B. Design, erect, shore, brace, and maintain formwork, according to ACI 301, to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until structure can support such loads.
- C. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117.
- D. Do not chamfer exterior corners and edges of permanently exposed concrete.

#### 3.2 EMBEDDED ITEMS

- A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.

#### 3.3 VAPOR RETARDERS

- A. Sheet Vapor Retarders: Place, protect, and repair sheet vapor retarder according to ASTM E 1643 and manufacturer's written instructions.
  - 1. Lap joints 6 inches (150 mm) and seal with manufacturer's recommended tape.

#### 3.4 STEEL REINFORCEMENT

- A. General: Comply with CRSI's "Manual of Standard Practice" for placing reinforcement.
  - 1. Do not cut or puncture vapor retarder. Repair damage and reseal vapor retarder before placing concrete.
  - 2. Lap Wall Footing Reinforcing: Minimum 27", 21" if laps staggered.

#### 3.5 CONCRETE PLACEMENT

- A. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections have been performed.
- B. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete will be placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as indicated. Deposit concrete to avoid segregation.
  - 1. Consolidate placed concrete with mechanical vibrating equipment according to ACI 301.

#### 3.6 FINISHING FORMED SURFACES

- A. Smooth-Formed Finish: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams. Repair and patch tie holes and defects. Remove fins and other projections that exceed specified limits on formed-surface irregularities.
  - 1. Finish similar to adjacent existing concrete surfaces, to be covered with a coating or covering material applied directly to concrete.
- B. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces unless otherwise indicated.

3.7 FINISHING FLOORS AND SLABS

- A. General: Comply with ACI 302.1R recommendations for screeding, restraightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.
- B. Trowel and Fine-Broom Finish: Apply a first trowel finish to surfaces where ceramic or quarry tile is to be installed by either thickset or thin-set method. While concrete is still plastic, slightly scarify surface with a fine broom.
  - 1. Comply with flatness and levelness tolerances for trowel-finished floor surfaces.
  - 2. Coordinate with Tile installer for specific requirements.

3.8 CONCRETE PROTECTING AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and ACI 301 for hot-weather protection during curing.
- B. Evaporation Retarder: Apply evaporation retarder to unformed concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h (1 kg/sq. m x h) before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.

3.9 CONCRETE SURFACE REPAIRS

- A. Defective Concrete: Repair and patch defective areas when approved by Architect. Remove and replace concrete that cannot be repaired and patched to Architect's approval.

3.10 FIELD QUALITY CONTROL

- A. Testing and Inspecting: Owner will engage a qualified testing and inspecting agency to perform field tests and inspections and prepare test reports.

END OF SECTION 033000



SECTION 042000 - UNIT MASONRY

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
  - 1. Concrete masonry units.
  - 2. Mortar and grout.
  - 3. Steel reinforcing bars.
  - 4. Masonry-joint reinforcement.
  - 5. Ties and anchors.
  - 6. Miscellaneous masonry accessories.
  - 7. Masonry waste disposal.

1.2 DEFINITIONS

- A. CMU(s): Concrete masonry unit(s).
- B. Reinforced Masonry: Masonry containing reinforcing steel in grouted cells.

1.3 SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For reinforcing steel. Detail bending, lap lengths, and placement of unit masonry reinforcing bars. Comply with ACI 315.
- C. Samples for Verification: For each type and color of exposed masonry unit.
- D. Mix Designs: For each type of mortar and grout. Include description of type and proportions of ingredients.
  - 1. Include test reports for mortar mixes required to comply with property specification. Test according to ASTM C 109/C 109M for compressive strength, ASTM C 1506 for water retention, and ASTM C 91/C 91M for air content.
  - 2. Include test reports, according to ASTM C 1019, for grout mixes required to comply with compressive strength requirement.

1.4 QUALITY ASSURANCE

- A. Field Verification: Unit masonry assemblies are to be installed in or adjacent to existing construction. Contractor to field verify existing conditions, coursing, and adjacent construction. Notify Architect of conditions that would affect the work.

PART 2 - PRODUCTS

2.1 UNIT MASONRY, GENERAL

- A. Masonry Standard: Comply with ACI 530.1 specifications.
- B. Defective Units: Referenced masonry unit standards may allow a certain percentage of units to contain chips, cracks, or other defects exceeding limits stated. Do not use units where such defects are exposed in the completed Work.
- C. Fire-Resistance Ratings: Comply with requirements for fire-resistance-rated assembly designs indicated.

1. Where fire-resistance-rated construction is indicated, units shall be listed and labeled by a qualified testing agency acceptable to authorities having jurisdiction.

## 2.2 CONCRETE MASONRY UNITS

- A. Shapes: Provide shapes indicated and as follows, with exposed surfaces matching exposed faces of adjacent units unless otherwise indicated.
  1. Provide special shapes for lintels, corners, jambs, sashes, movement joints, headers, bonding, and other special conditions.
- B. CMUs: ASTM C 90.
  1. Grade N, two core type for reinforced masonry. Design based on  $f'm = 1900$  psi.
  2. Density Classification: Normal weight.

## 2.3 MORTAR AND GROUT MATERIALS

- A. Portland Cement: ASTM C 150/C 150M, Type I or II, except Type III may be used for cold-weather construction. Provide natural color or white cement as required to produce mortar color indicated.
- B. Hydrated Lime: ASTM C 207, Type S.
- C. Portland Cement-Lime Mix: Packaged blend of Portland cement and hydrated lime containing no other ingredients.
- D. Masonry Cement: ASTM C 91/C 91M.
- E. Aggregate for Mortar: ASTM C 144.
  1. For joints less than 1/4-inch (6 mm) thick, use aggregate graded with 100 percent passing the No. 16 (1.18-mm) sieve.
  2. White-Mortar Aggregates: Natural white sand or crushed white stone.
- F. Ready-Mixed Mortar: Cementitious materials, water, and aggregate complying with requirements specified in the Article; combined with set-controlling admixtures to produce a ready-mixed mortar complying with ASTM C1142.
- G. Aggregate for Grout: ASTM C 404.
- H. Water: Potable.

## 2.4 REINFORCEMENT

- A. Uncoated-Steel Reinforcing Bars: Reinforcing bars shall be ASTM A-615, Grade 60, lap minimum 40 bar diameters for #5 bars and smaller, lap minimum 52 bar diameters for bars larger than #5 unless noted otherwise.
- B. Masonry-Joint Reinforcement for Single-Wythe Masonry: Ladder or truss type with single pair of side rods. ASTM A-82, 9 ga, hot dipped galvanized per ASTM A-153 (1.5 oz per sf.), ladder type, equal to Dur-A-Wal.

## 2.5 TIES AND ANCHORS

- A. General: Ties and anchors shall extend at least 1-1/2 inches (38 mm) into veneer but with at least a 5/8-inch (16-mm) cover on outside face.
- B. Materials: Provide ties and anchors specified in this article that are made from materials that comply with the following unless otherwise indicated:
  1. Hot-Dip Galvanized, Carbon-Steel Wire: ASTM A 82/A 82M, with ASTM A 153/A 153M, Class B-2 coating.

2. Steel Sheet, Galvanized after Fabrication: ASTM A 1008/A 1008M, Commercial Steel, with ASTM A 153/A 153M, Class B coating.
  3. Steel Plates, Shapes, and Bars: ASTM A 36/A 36M.
- C. Individual Wire Ties: Rectangular units with closed ends and not less than 4 inches (100 mm) wide.
1. Wire: Fabricate from 3/16-inch- (4.76-mm-) diameter, hot-dip galvanized-steel wire.
- D. Rigid Anchors: Fabricate from steel bars 1-1/2 inches (38 mm) wide by 1/4 inch (6.35 mm) thick by 24 inches (610 mm) long, with ends turned up 2 inches (51 mm) or with cross pins unless otherwise indicated.
1. Corrosion Protection: Hot-dip galvanized to comply with ASTM A 153/A 153M Epoxy coating 0.020 inch (0.51 mm) thick.

## 2.6 MISCELLANEOUS MASONRY ACCESSORIES

- A. Compressible Filler: Premolded filler strips complying with ASTM D 1056, Grade 2A1; compressible up to 35 percent; of width and thickness indicated; formulated from neoprene or urethane.
- B. Preformed Control-Joint Gaskets: Made from styrene-butadiene-rubber compound, complying with ASTM D 2000, Designation M2AA-805 and designed to fit standard sash block and to maintain lateral stability in masonry wall; size and configuration as indicated.
- C. Bond-Breaker Strips: Asphalt-saturated felt complying with ASTM D 226/D 226M, Type I (No. 15 asphalt felt).

## 2.7 MORTAR AND GROUT MIXES

- A. General: Do not use admixtures, including pigments, air-entraining agents, accelerators, retarders, water-repellent agents, antifreeze compounds, or other admixtures unless otherwise indicated.
1. Do not use calcium chloride in mortar or grout.
  2. Use portland cement-lime or masonry cement mortar unless otherwise indicated.
  3. For exterior masonry, use portland cement-lime or masonry cement mortar.
  4. For reinforced masonry, use portland cement-lime or masonry cement mortar.
  5. Add cold-weather admixture (if used) at same rate for all mortar that will be exposed to view, regardless of weather conditions, to ensure that mortar color is consistent.
- B. Preblended, Dry Mortar Mix: Furnish dry mortar ingredients in form of a preblended mix. Measure quantities by weight to ensure accurate proportions, and thoroughly blend ingredients before delivering to Project site.
- C. Mortar for Unit Masonry: Comply with ASTM C 270, Proportion Specification. Provide the following types of mortar for applications stated unless another type is indicated.
1. For masonry below grade or in contact with earth, use Type M.
  2. For reinforced masonry, use Type S.
  3. For above-grade, load-bearing, use Type M or S.
  4. For above grade non-load-bearing partitions, Type N.
  5. For all exterior brick veneer use Type N.
- D. Grout for Unit Masonry: Comply with ASTM C 476.
1. Proportion grout in accordance with ASTM C 476, paragraph 4.2.2 for specified 28-day compressive strength not less than 2000 psi, tested per ASTM C1019.
  2. Provide grout with a slump of 8 to 11 inches (200 to 280 mm) as measured according to ASTM C 143.

### PART 3 - EXECUTION

#### 3.1 INSTALLATION, GENERAL

- A. Use full-size units without cutting if possible. If cutting is required to provide a continuous pattern or to fit adjoining construction, cut units with motor-driven saws; provide clean, sharp, unchipped edges. Allow units to dry before laying unless wetting of units is specified. Install cut units with cut surfaces and, where possible, cut edges concealed.
- B. Select and arrange units for exposed unit masonry to produce a uniform blend of colors and textures. Mix units from several pallets or cubes as they are placed.
- C. Provide lintels at all openings larger than 8" wide, see schedule.

#### 3.2 TOLERANCES

- A. Dimensions and Locations of Elements:
  - 1. For dimensions in cross section or elevation, do not vary by more than plus 1/2 inch (12 mm) or minus 1/4 inch (6 mm).
  - 2. For location of elements in plan, do not vary from that indicated by more than plus or minus 1/2 inch (12 mm).
  - 3. For location of elements in elevation, do not vary from that indicated by more than plus or minus 1/4 inch (6 mm) in a story height or 1/2 inch (12 mm) total.
- B. Lines and Levels:
  - 1. For bed joints and top surfaces of bearing walls, do not vary from level by more than 1/4 inch in 10 feet (6 mm in 3 m), or 1/2-inch (12-mm) maximum.
  - 2. For conspicuous horizontal lines, such as lintels, sills, parapets, and reveals, do not vary from level by more than 1/8 inch in 10 feet (3 mm in 3 m), 1/4 inch in 20 feet (6 mm in 6 m), or 1/2-inch (12-mm) maximum.
  - 3. For vertical lines and surfaces, do not vary from plumb by more than 1/4 inch in 10 feet (6 mm in 3 m), 3/8 inch in 20 feet (9 mm in 6 m), or 1/2-inch (12-mm) maximum.
  - 4. For conspicuous vertical lines, such as external corners, door jambs, reveals, and expansion and control joints, do not vary from plumb by more than 1/8 inch in 10 feet (3 mm in 3 m), 1/4 inch in 20 feet (6 mm in 6 m), or 1/2-inch (12-mm) maximum.
  - 5. For lines and surfaces, do not vary from straight by more than 1/4 inch in 10 feet (6 mm in 3 m), 3/8 inch in 20 feet (9 mm in 6 m), or 1/2-inch (12-mm) maximum.
- C. Joints:
  - 1. For bed joints, do not vary from thickness indicated by more than plus or minus 1/8 inch (3 mm), with a maximum thickness limited to 1/2 inch (12 mm).
  - 2. For head and collar joints, do not vary from thickness indicated by more than plus 3/8 inch (9 mm) or minus 1/4 inch (6 mm).
  - 3. For exposed head joints, do not vary from thickness indicated by more than plus or minus 1/8 inch (3 mm).

#### 3.3 LAYING MASONRY WALLS

- A. Lay out walls in advance for accurate spacing of surface bond patterns with uniform joint thicknesses and for accurate location of openings, movement-type joints, returns, and offsets. Avoid using less-than-half-size units, particularly at corners, jambs, and, where possible, at other locations.
- B. Bond Pattern for Exposed Masonry: Unless otherwise indicated, lay exposed masonry in running bond; do not use units with less-than-nominal 4-inch (100-mm) horizontal face dimensions at corners or jambs.

- C. Built-in Work: As construction progresses, build in items specified in this and other Sections. Fill in solidly with masonry around built-in items.
- D. CMU Control joints shall be "Michigan" type unless noted otherwise. Horizontal reinforcing shall be discontinuous at control joints.
- E. Fill space between steel frames and masonry solidly with mortar unless otherwise indicated.
- F. Fill cores in hollow CMUs with grout 24 inches (600 mm) under bearing plates, beams, lintels, posts, and similar items unless otherwise indicated.

### 3.4 MORTAR BEDDING AND JOINTING

- A. Lay hollow brick and CMUs as follows:
  - 1. Bed face shells in mortar and make head joints of depth equal to bed joints.
  - 2. Bed webs in mortar in all courses of piers, columns, and pilasters.
  - 3. Bed webs in mortar in grouted masonry, including starting course on footings.
  - 4. Fully bed entire units, including areas under cells, at starting course on footings where cells are not grouted.
- B. Lay solid masonry units with completely filled bed and head joints; butter ends with sufficient mortar to fill head joints and shove into place. Do not deeply furrow bed joints or slush head joints.
- C. Tool exposed joints slightly concave when thumbprint hard, using a jointer larger than joint thickness unless otherwise indicated.
- D. Cut joints flush for masonry walls to receive plaster or other direct-applied finishes (other than paint) unless otherwise indicated.

### 3.5 MASONRY-JOINT REINFORCEMENT

- A. General: Install entire length of longitudinal side rods in mortar with a minimum cover of 5/8 inch (16 mm) on exterior side of walls, 1/2 inch (13 mm) elsewhere. Lap reinforcement a minimum of 6 inches (150 mm).
  - 1. Vertical wall reinforcing: Provide (1) #4 each side of masonry openings, control joints, and as shown, in grout filled cores.
  - 2. Horizontal wall reinforcing: Per ASTM A-82, 9 ga, hot dipped galvanized per ASTM A-153 (1.5 oz per sf.), ladder type, equal to Dur-A-Wal. Bed joints at 16" o.c. and at 1<sup>st</sup> and 2<sup>nd</sup> bed joints at bottom of wall, top of wall, above lintels and below sills. Reinforcing continuous except at vertical control joints. Side rods lapped a minimum of 6" at splices. Provide prefabricated corners and tees.
- B. Interrupt joint reinforcement at control and expansion joints unless otherwise indicated.
- C. Provide continuity at wall intersections by using prefabricated T-shaped units.
- D. Provide continuity at corners by using prefabricated L-shaped units.
  - 1. Space anchors as indicated, but not more than 24 inches (610 mm) o.c. vertically and 36 inches (915 mm) o.c. horizontally.

### 3.6 REINFORCED UNIT MASONRY INSTALLATION

- A. Temporary Formwork and Shores: Construct formwork and shores as needed to support reinforced masonry elements during construction.
  - 1. Construct formwork to provide shape, line, and dimensions of completed masonry as indicated. Make forms sufficiently tight to prevent leakage of mortar and grout. Brace,

- tie, and support forms to maintain position and shape during construction and curing of reinforced masonry.
2. Do not remove forms and shores until reinforced masonry members have hardened sufficiently to carry their own weight and that of other loads that may be placed on them during construction.
- B. Placing Reinforcement: Comply with requirements in ACI 530.
1. Horizontal wall reinforcing: Bed joints at 16" o.c. and at 1<sup>st</sup> and 2<sup>nd</sup> bed joints at bottom of wall, top of wall, above lintels and below sills. Reinforcing continuous except at vertical control joints. Side rods lapped a minimum of 6" at splices. Provide prefabricated corners and tees.
  2. Vertical wall reinforcing: 1 - #4 each side of masonry openings, control joints and as shown, in grout filled block cores.
- C. Grouting: Do not place grout until entire height of masonry to be grouted has attained enough strength to resist grout pressure.
1. Comply with requirements in TMS 602/ACI 530.1/ASCE 6 for cleanouts and for grout placement, including minimum grout space and maximum pour height.
  2. Limit height of vertical grout pours to not more than 48 inches (1220 mm).
  3. Grouting shall be mechanically consolidated in place; consolidation by rodding is not acceptable.
  4. Provide completely grouted units:
    - a. Under cast-in-place concrete floor bearing.
    - b. Under steel joist or beam bearing.

### 3.7 FIELD QUALITY CONTROL

- A. Testing and Inspecting: The General Contractor will engage special inspectors to perform tests and inspections and prepare reports. Allow inspectors access to scaffolding and work areas as needed to perform tests and inspections. Retesting of materials that fail to comply with specified requirements shall be done at Contractor's expense.
- B. Inspections: Level 1 special inspections according to the Michigan Building Code.
1. Begin masonry construction only after inspectors have verified proportions of site-prepared mortar.
  2. Place grout only after inspectors have verified compliance of grout spaces and of grades, sizes, and locations of reinforcement.
  3. Place grout only after inspectors have verified proportions of site-prepared grout.
- C. Testing Prior to Construction: One set of tests.
- D. Testing Frequency: One set of tests for each 5000 sq. ft. (464 sq. m) of wall area or portion thereof.
- E. Clay Masonry Unit Test: For each type of unit provided, according to ASTM C 67 for compressive strength.
- F. Concrete Masonry Unit Test: For each type of unit provided, according to ASTM C 140 for compressive strength.
- G. Mortar Aggregate Ratio Test (Proportion Specification): For each mix provided, according to ASTM C 780.
- H. Mortar Test (Property Specification): For each mix provided, according to ASTM C 780. Test mortar for mortar air content and compressive strength.
- I. Grout Test (Compressive Strength): For each mix provided, according to ASTM C 1019.

3.8 REPAIRING, POINTING, AND CLEANING

- A. In-Progress Cleaning: Clean unit masonry as work progresses by dry brushing to remove mortar fins and smears before tooling joints.
- B. Final Cleaning: After mortar is thoroughly set and cured, clean exposed masonry as follows:
  - 1. Remove large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels.
  - 2. Test cleaning methods on sample wall panel; leave one-half of panel uncleaned for comparison purposes.
  - 3. Protect adjacent surfaces from contact with cleaner.
  - 4. Wet wall surfaces with water before applying cleaners; remove cleaners promptly by rinsing surfaces thoroughly with clear water.
  - 5. Clean brick by bucket-and-brush hand-cleaning method described in BIA Technical Notes 20.
  - 6. Clean masonry with a proprietary acidic cleaner applied according to manufacturer's written instructions.

3.9 MASONRY WASTE DISPOSAL

- A. Waste Disposal as Fill Material: Dispose of clean masonry waste, including excess or soil-contaminated sand, waste mortar, and broken masonry units, by crushing and mixing with fill material as fill is placed.
  - 1. Do not dispose of masonry waste as fill within 18 inches (450 mm) of finished grade.
- B. Excess Masonry Waste: Remove excess clean masonry waste that cannot be used as fill, as described above or recycled, and other masonry waste, and legally dispose of off Owner's property.

END OF SECTION 042000

SECTION 054000 - COLD-FORMED METAL FRAMING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
  - 1. Exterior and interior non-load-bearing wall framing.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of cold-formed steel framing product and accessory.
- B. Shop Drawings:
  - 1. Include layout, spacings, sizes, thicknesses, and types of cold-formed steel framing; fabrication; and fastening and anchorage details, including mechanical fasteners.
  - 2. Indicate reinforcing channels, opening framing, supplemental framing, strapping, bracing, bridging, splices, accessories, connection details, and attachment to adjoining work.

1.3 INFORMATIONAL SUBMITTALS

- A. Welding certificates.
- B. Product test reports.

1.4 QUALITY ASSURANCE

- A. Product Tests: Mill certificates or data from a qualified independent testing agency.
- B. Welding Qualifications: Qualify procedures and personnel according to AWS D1.3/D1.3M, "Structural Welding Code - Sheet Steel."
- C. Comply with AISI S230 "Standard for Cold-Formed Steel Framing - Prescriptive Method for One and Two Family Dwellings."
- D. AISI Specifications and Standards: Comply with AISI's "North American Specification for the Design of Cold-Formed Steel Structural Members" and its "Standard for Cold-Formed Steel Framing - General Provisions."
  - 1. Comply with AISI's "Standard for Cold-Formed Steel Framing - Header Design."

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Subject to compliance with requirements, provide products by one of the following:
  - 1. ClarkDietrich Building Systems.
  - 2. SCAFCO Corporation.
  - 3. United Metal Products, Inc.

2.2 PERFORMANCE REQUIREMENTS

- A. AISI Specifications and Standards: Unless more stringent requirements are indicated, comply with AISI S100 and AISI S200.
- B. Fire-Resistance Ratings: Comply with ASTM E 119; testing by a qualified testing agency.



1. Indicate design designations from UL's "Fire Resistance Directory" or from the listings of another qualified testing agency.

### 2.3 COLD-FORMED STEEL FRAMING, GENERAL

- A. Steel Sheet: ASTM A 1003/A 1003M, Structural Grade, Type H, metallic coated, of grade and coating weight as follows:
  1. Grade: As required by structural performance.
  2. Coating: G60 (Z180) galvanized.

### 2.4 EXTERIOR NON-LOAD-BEARING WALL FRAMING

- A. Steel Studs: Manufacturer's standard C-shaped steel studs, of web depths indicated, punched, with stiffened flanges, and as follows:
  1. Minimum Base-Metal Thickness: 0.0329inch (1.09 mm) unless noted otherwise on the drawings.
  2. Flange Width: 1-5/8 inches (41 mm).
- B. Steel Track: Manufacturer's standard U-shaped steel track, of web depths indicated, unpunched, with unstiffened flanges, and matching minimum base-metal thickness of steel studs.
- C. Vertical Deflection Clips: Manufacturer's standard clips, capable of accommodating upward and downward vertical displacement of primary structure through positive mechanical attachment to stud web.
- D. Double Deflection Tracks: Manufacturer's double, deep-leg, U-shaped steel tracks, consisting of nested inner and outer tracks; unpunched, with unstiffened flanges.

### 2.5 FRAMING ACCESSORIES

- A. Fabricate steel-framing accessories from steel sheet, ASTM A 1003/A 1003M, Structural Grade, Type H, metallic coated, of same grade and coating weight used for framing members.
- B. Provide accessories of manufacturer's standard thickness and configuration.

### 2.6 ANCHORS, CLIPS, AND FASTENERS

- A. Steel Shapes and Clips: ASTM A 36/A 36M, zinc coated by hot-dip process according to ASTM A 123/A 123M.
- B. Anchor Bolts: ASTM F 1554, Grade 36, threaded carbon-steel hex-headed bolts and carbon-steel nuts; and flat, hardened-steel washers; zinc coated by mechanically deposition according to ASTM B 695, Class 50.
- C. Expansion Anchors: Fabricated from corrosion-resistant materials, with allowable load or strength design capacities calculated according to ICC-ES AC193 and ACI 318 greater than or equal to the design load, as determined by testing per ASTM E 488 conducted by a qualified testing agency.
- D. Power-Actuated Anchors: Fastener system of type suitable for application indicated, fabricated from corrosion-resistant materials, with allowable load capacities calculated according to ICC-ES AC70, greater than or equal to the design load, as determined by testing per ASTM E 1190 conducted by a qualified testing agency.
- E. Mechanical Fasteners: ASTM C 1513, corrosion-resistant-coated, self-drilling, self-tapping, steel drill screws.
  1. Head Type: Low-profile head beneath sheathing, manufacturer's standard elsewhere.

## 2.7 MISCELLANEOUS MATERIALS

- A. Galvanizing Repair Paint: SSPC-Paint 20 or MIL-P-21035B.
- B. Cement Grout: Portland cement, ASTM C 150, Type I; and clean, natural sand, ASTM C 404. Mix at ratio of 1 part cement to 2-1/2 parts sand, by volume, with minimum water required for placement and hydration.
- C. Nonmetallic, Nonshrink Grout: Premixed, nonmetallic, noncorrosive, nonstaining grout containing selected silica sands, portland cement, shrinkage-compensating agents, and plasticizing and water-reducing agents, complying with ASTM C 1107/C 1107M, with fluid consistency and 30-minute working time.
- D. Shims: Load bearing, high-density multimonomer plastic, and nonleaching; or of cold-formed steel of same grade and coating as framing members supported by shims.
- E. Sealer Gaskets: Closed-cell neoprene foam, 1/4 inch (6.4 mm) thick, selected from manufacturer's standard widths to match width of bottom track or rim track members.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Install load bearing shims or grout between the underside of load-bearing wall bottom track and the top of foundation wall or slab at locations with a gap larger than 1/4 inch (6 mm) to ensure a uniform bearing surface on supporting concrete or masonry construction.
- B. Install sealer gaskets at the underside of wall bottom track or rim track and at the top of foundation wall or slab at stud or joist locations.

### 3.2 INSTALLATION, GENERAL

- A. Install cold-formed steel framing according to AISI S200 and to manufacturer's written instructions unless more stringent requirements are indicated.
- B. Install cold-formed steel framing and accessories plumb, square, and true to line, and with connections securely fastened.
- C. Install framing members in one-piece lengths.
- D. Install temporary bracing and supports to secure framing and support loads comparable in intensity to those for which structure was designed. Maintain braces and supports in place, undisturbed, until entire integrated supporting structure has been completed and permanent connections to framing are secured.
- E. Do not bridge building expansion joints with cold-formed steel framing. Independently frame both sides of joints.
- F. Install insulation, specified in Section 072100 "Thermal Insulation," in built-up exterior framing members, such as headers, sills, boxed joists, and multiple studs at openings, that are inaccessible on completion of framing work.
- G. Fasten hole reinforcing plate over web penetrations that exceed size of manufacturer's approved or standard punched openings.
- H. Erection Tolerances: Install cold-formed steel framing level, plumb, and true to line to a maximum allowable tolerance variation of 1/8 inch in 10 feet (1:960) and as follows:
  - 1. Space individual framing members no more than plus or minus 1/8 inch (3 mm) from plan location. Cumulative error shall not exceed minimum fastening requirements of sheathing or other finishing materials.

### 3.3 FIELD QUALITY CONTROL

- A. Testing: The Construction Manager will engage a qualified independent testing and inspecting agency to perform field tests and inspections and prepare test reports.
- B. Field and shop welds will be subject to testing and inspecting.
- C. Testing agency will report test results promptly and in writing to Contractor and Architect.
- D. Remove and replace work where test results indicate that it does not comply with specified requirements.
- E. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

### 3.4 REPAIRS AND PROTECTION

- A. Galvanizing Repairs: Prepare and repair damaged galvanized coatings on fabricated and installed cold-formed steel framing with galvanized repair paint according to ASTM A 780 and manufacturer's written instructions.
- B. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, that ensure that cold-formed steel framing is without damage or deterioration at time of Substantial Completion.

END OF SECTION 054000

## SECTION 055000 - METAL FABRICATIONS

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Miscellaneous steel framing and supports.
- B. Products furnished, but not installed, under this Section include the following:
  - 1. Loose steel lintels.
  - 2. Anchor bolts, steel pipe sleeves, slotted-channel inserts, and wedge-type inserts indicated to be cast into concrete or built into unit masonry.
  - 3. Steel weld plates and angles for casting into concrete for applications where they are not specified in other Sections.

#### 1.2 ACTION SUBMITTALS

- A. Shop Drawings: Show fabrication and installation details. Include plans, elevations, sections, and details of metal fabrications and their connections. Show anchorage and accessory items.

### PART 2 - PRODUCTS

#### 2.1 PERFORMANCE REQUIREMENTS

- A. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes acting on exterior metal fabrications by preventing buckling, opening of joints, overstressing of components, failure of connections, and other detrimental effects.
  - 1. Temperature Change: 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.

#### 2.2 METALS

- A. Metal Surfaces, General: Provide materials with smooth, flat surfaces unless otherwise indicated. For metal fabrications exposed to view in the completed Work, provide materials without seam marks, roller marks, rolled trade names, or blemishes.
- B. Steel Wide Flange Shapes: ASTM A992, Gr. 50.
- C. Steel Plates, Shapes, and Bars: ASTM A 36/A 36M.
- D. Stainless-Steel Bars and Shapes: ASTM A 276, Type 304.
- E. Rolled-Steel Floor Plate: ASTM A 786/A 786M, rolled from plate complying with ASTM A 36/A 36M or ASTM A 283/A 283M, Grade C or D.
- F. Steel Tubing: ASTM A 500/A 500M, Grade B, cold-formed steel tubing.
- G. Steel Pipe: ASTM A 53/A 53M, Standard Weight (Schedule 40) unless otherwise indicated.
- H. Slotted Channel Framing: Cold-formed metal box channels (struts) complying with MFMA-4.
- I. Cast Iron: Either gray iron, ASTM A 48/A 48M, or malleable iron, ASTM A 47/A 47M, unless otherwise indicated.
- J. Aluminum Extrusions: ASTM B 221 (ASTM B 221M), Alloy 6063-T6.
- K. Aluminum Castings: ASTM B 26/B 26M, Alloy 443.0-F.
- L. Bronze Extrusions: ASTM B 455, Alloy UNS No. C38500 (extruded architectural bronze).
- M. Bronze Castings: ASTM B 584, Alloy UNS No. C83600 (leaded red brass) or No. C84400 (leaded semired brass).
- N. Nickel Silver Castings: ASTM B 584, Alloy UNS No. C97600 (20 percent leaded nickel bronze).

## 2.3 FASTENERS

- A. General: Unless otherwise indicated, provide Type 304 stainless-steel fasteners for exterior use and zinc-plated fasteners with coating complying with ASTM B 633 or ASTM F 1941 (ASTM F 1941M), Class Fe/Zn 5, at exterior walls. Select fasteners for type, grade, and class required.
  - 1. Provide stainless-steel fasteners for fastening aluminum.
  - 2. Provide stainless-steel fasteners for fastening stainless steel.
  - 3. Provide stainless-steel fasteners for fastening nickel silver.
  - 4. Provide bronze fasteners for fastening bronze.
- B. Cast-in-Place Anchors in Concrete: Either threaded type or wedge type unless otherwise indicated; galvanized ferrous castings, either ASTM A 47/A 47M malleable iron or ASTM A 27/A 27M cast steel. Provide bolts, washers, and shims as needed, all hot-dip galvanized per ASTM F 2329.
- C. Post-Installed Anchors: Torque-controlled expansion anchors or chemical anchors.
- D. Slotted-Channel Inserts: Cold-formed, hot-dip galvanized-steel box channels (struts) complying with MFMA-4, 1-5/8 by 7/8 inches (41 by 22 mm) by length indicated with anchor straps or studs not less than 3 inches (75 mm) long at not more than 8 inches (200 mm) o.c. Provide with temporary filler and tee-head bolts, complete with washers and nuts, all zinc-plated to comply with ASTM B 633, Class Fe/Zn 5, as needed for fastening to inserts.

## 2.4 MISCELLANEOUS MATERIALS

- A. Universal Shop Primer: Fast-curing, lead- and chromate-free, universal modified-alkyd primer complying with MPI#79 and compatible with topcoat.
- B. Galvanizing Repair Paint: High-zinc-dust-content paint complying with SSPC-Paint 20 and compatible with paints specified to be used over it.
- C. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D 1187/D 1187M.
- D. Nonshrink, Nonmetallic Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107/C 1107M. Provide grout specifically recommended by manufacturer for interior and exterior applications.

## 2.5 FABRICATION, GENERAL

- A. Shop Assembly: Preassemble items in the shop to greatest extent possible. Use connections that maintain structural value of joined pieces.
- B. Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges. Remove sharp or rough areas on exposed surfaces.
- C. Weld corners and seams continuously to comply with the following:
  - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
  - 2. Obtain fusion without undercut or overlap.
  - 3. Remove welding flux immediately.
  - 4. At exposed connections, finish exposed welds and surfaces smooth and blended.
- D. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners or welds where possible. Locate joints where least conspicuous.
- E. Fabricate seams and other connections that are exposed to weather in a manner to exclude water. Provide weep holes where water may accumulate.
- F. Where units are indicated to be cast into concrete or built into masonry, equip with integrally welded steel strap anchors not less than 8 inches (200 mm) from ends and corners of units and 24 inches (600 mm) o.c.

2.6 MISCELLANEOUS FRAMING AND SUPPORTS

- A. General: Provide steel framing and supports not specified in other Sections as needed to complete the Work.
- B. Fabricate units from steel shapes, plates, and bars of welded construction unless otherwise indicated. Fabricate to sizes, shapes, and profiles indicated and as necessary to receive adjacent construction.

2.7 STEEL WELD PLATES AND ANGLES

- A. Provide steel weld plates and angles not specified in other Sections, for items supported from concrete construction as needed to complete the Work. Provide each unit with no fewer than two integrally welded steel strap anchors for embedding in concrete.

2.8 FINISHES, GENERAL

- A. Finish metal fabrications after assembly.

2.9 STEEL AND IRON FINISHES

- A. Galvanizing: Hot-dip galvanize items as indicated to comply with ASTM A 153/A 153M for steel and iron hardware and with ASTM A 123/A 123M for other steel and iron products.
- B. Shop prime iron and steel items not indicated to be galvanized unless they are to be embedded in concrete or masonry, or unless otherwise indicated.
  - 1. Shop prime with universal shop primer.
- C. Shop Priming: Apply shop primer to comply with SSPC-PA 1, "Paint Application Specification No. 1: Shop, Field, and Maintenance Painting of Steel," for shop painting.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Cutting, Fitting, and Placement: Perform cutting, drilling, and fitting required for installing metal fabrications. Set metal fabrications accurately in location, alignment, and elevation; with edges and surfaces level, plumb, true, and free of rack; and measured from established lines and levels.
- B. Fit exposed connections accurately together to form hairline joints. Weld connections that are not to be left as exposed joints but cannot be shop welded because of shipping size limitations. Do not weld, cut, or abrade surfaces of exterior units that have been hot-dip galvanized after fabrication and are for bolted or screwed field connections.
- C. Field Welding: Comply with the following requirements:
  - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
  - 2. Obtain fusion without undercut or overlap.
  - 3. Remove welding flux immediately.
  - 4. At exposed connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing and contour of welded surface matches that of adjacent surface.
- D. Fastening to In-Place Construction: Provide anchorage devices and fasteners where metal fabrications are required to be fastened to in-place construction.
- E. Provide temporary bracing or anchors in formwork for items that are to be built into concrete, masonry, or similar construction.

3.2 ADJUSTING AND CLEANING

- A. Touchup Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas. Paint uncoated and abraded areas with the same material as used for shop painting to comply with SSPC-PA 1 for touching up shop-painted surfaces.
- B. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing to comply with ASTM A 780/A 780M.

END OF SECTION 055000

SECTION 061053 - MISCELLANEOUS ROUGH CARPENTRY

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
  - 1. Framing with dimension lumber.
  - 2. Wood blocking and nailers.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of process and factory-fabricated product.
  - 1. Include data for wood-preservative treatment from chemical treatment manufacturer and certification by treating plant that treated materials comply with requirements

1.3 INFORMATIONAL SUBMITTALS

- A. Material Certificates: For dimension lumber specified to comply with minimum allowable unit stresses. Indicate species and grade selected for each use and design values approved by the ALSC Board of Review.
- B. Evaluation Reports: For the following, from ICC-ES:
  - 1. Wood-preservative-treated wood.
  - 2. Power-driven fasteners.
  - 3. Metal framing anchors.

PART 2 - PRODUCTS

2.1 WOOD PRODUCTS, GENERAL

- A. Lumber: DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated, comply with the applicable rules of any rules-writing agency certified by the ALSC Board of Review. Grade lumber by an agency certified by the ALSC Board of Review to inspect and grade lumber under the rules indicated.
  - 1. Factory mark each piece of lumber with grade stamp of grading agency.
  - 2. Dress lumber, S4S, unless otherwise indicated.
- B. Maximum Moisture Content of Lumber: 15 percent for 2-inch nominal (38-mm actual) thickness or less.

2.2 WOOD-PRESERVATIVE-TREATED MATERIAL

- A. Preservative Treatment by Pressure Process: AWWA U1; Use Category UC2 for interior construction and Category UC3b for exterior construction.
  - 1. Preservative Chemicals: Acceptable to authorities having jurisdiction and containing no arsenic or chromium.
- B. Kiln-dry lumber after treatment to a maximum moisture content of 19 percent. Do not use material that is warped or that does not comply with requirements for untreated material.
- C. Mark lumber with treatment quality mark of an inspection agency approved by the ALSC Board of Review.
- D. Application: Treat items indicated on Drawings, and the following:
  - 1. Wood, nailers, blocking, stripping, and similar members in connection with flashing.



2. Wood sills, sleepers, blocking, furring, stripping, and similar concealed members in contact with masonry or concrete.

### 2.3 FIRE-RETARDANT-TREATED MATERIALS

- A. General: Where fire-retardant-treated materials are indicated, use materials complying with requirements in this article, that are acceptable to authorities having jurisdiction, and with fire-test-response characteristics specified as determined by testing identical products per test method indicated by a qualified testing agency.
- B. Fire-Retardant-Treated Lumber and Plywood by Pressure Process: Products with a flame spread index of 25 or less when tested according to ASTM E 84, and with no evidence of significant progressive combustion when the test is extended an additional 20 minutes, and with the flame front not extending more than 10.5 feet (3.2 m) beyond the centerline of the burners at any time during the test.
  1. Exterior Type: Treated materials shall comply with requirements specified above for fire-retardant-treated lumber and plywood by pressure process after being subjected to accelerated weathering according to ASTM D 2898. Use for exterior locations and where indicated.
  2. Interior Type A: Treated materials shall have a moisture content of 28 percent or less when tested according to ASTM D 3201 at 92 percent relative humidity. Use where exterior type is not indicated.
- C. Kiln-dry lumber and plywood after treatment to a maximum moisture content of 15 percent.
- D. Identify fire-retardant-treated wood with appropriate classification marking of qualified testing agency.
- E. Application: Treat items indicated on Drawings, and the following:
  1. Plywood backing panels.

### 2.4 DIMENSION LUMBER FRAMING

- A. Framing: No. 2 grade of any of the following species:
  1. Hem-fir (north); NLGA.
  2. Southern pine; SPIB.
  3. Douglas fir-larch; WCLIB or WWPA.
  4. Hem-fir; WCLIB or WWPA.

### 2.5 MISCELLANEOUS LUMBER

- A. General: Provide miscellaneous lumber indicated and lumber for support or attachment of other construction, including the following:
  1. Blocking.
  2. Nailers.
  3. Furring.
  4. Grounds.
- B. Dimension Lumber Items: Construction or No. 2 grade lumber of any species.
- C. Concealed Boards: 15 percent maximum moisture content and any of the following species and grades:
  1. Mixed southern pine or southern pine; No. 2 grade; SPIB.
  2. Eastern softwoods; No. 2 Common grade; NeLMA.
  3. Northern species; No. 2 Common grade; NLGA.
  4. Western woods; Construction or No. 2 Common grade; WCLIB or WWPA.

## 2.6 FASTENERS

- A. General: Fasteners shall be of size and type indicated and shall comply with requirements specified in this article for material and manufacture.
  - 1. Where rough carpentry is exposed to weather, in ground contact, pressure-preservative treated, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.
- B. Power-Driven Fasteners: Fastener systems with an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC70.

## 2.7 METAL FRAMING ANCHORS

- A. Basis-of-Design Product: Subject to compliance with requirements, provide product indicated on Drawings or comparable product by one of the following:
  - 1. Cleveland Steel Specialty Co.
  - 2. KC Metals Products, Inc.
  - 3. Phoenix Metal Products, Inc.
  - 4. Simpson Strong-Tie Co., Inc.
  - 5. USP Structural Connectors.
- B. Allowable Design Loads: Provide products with allowable design loads, as published by manufacturer, that meet or exceed those of products of manufacturers listed. Manufacturer's published values shall be determined from empirical data or by rational engineering analysis and demonstrated by comprehensive testing performed by a qualified independent testing agency.
- C. Galvanized-Steel Sheet: Hot-dip, zinc-coated steel sheet complying with ASTM A 653/A 653M, G60 (Z180) coating designation.
  - 1. Use for interior locations unless otherwise indicated.
- D. Hot-Dip, Heavy-Galvanized Steel Sheet: ASTM A 653/A 653M; structural steel (SS), high-strength low-alloy steel Type A (HSLAS Type A), or high-strength low-alloy steel Type B (HSLAS Type B); G185 (Z550) coating designation; and not less than 0.036 inch (0.9 mm) thick.
  - 1. Use for wood-preservative-treated lumber and where indicated.

## 2.8 MISCELLANEOUS MATERIALS

- A. Flexible Flashing: Composite, self-adhesive, flashing product consisting of a pliable, rubberized-asphalt compound, bonded to a high-density polyethylene film, aluminum foil, or spunbonded polyolefin to produce an overall thickness of not less than 0.025 inch (0.6 mm).
- B. Adhesives for Gluing Furring and Sleepers to Concrete or Masonry: Formulation complying with ASTM D 3498 that is approved for use indicated by adhesive manufacturer.

## PART 3 - EXECUTION

### 3.1 INSTALLATION, GENERAL

- A. Framing Standard: Comply with AF&PA's WCD 1, "Details for Conventional Wood Frame Construction," unless otherwise indicated.
- B. Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit rough carpentry accurately to other construction. Locate furring, nailers, blocking, grounds, and similar supports to comply with requirements for attaching other construction.
- C. Do not splice structural members between supports unless otherwise indicated.

- D. Comply with AWPA M4 for applying field treatment to cut surfaces of preservative-treated lumber.
- E. Metal Framing Anchors: Install metal framing anchors to comply with manufacturer's written instructions. Install fasteners through each fastener hole.
- F. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:
  - 1. Table 2304.9.1, "Fastening Schedule," in ICC's International Building Code (IBC).
  - 2. Table R602.3(1), "Fastener Schedule for Structural Members," and Table R602.3(2), "Alternate Attachments," in ICC's International Residential Code for One- and Two-Family Dwellings.
  - 3. ICC-ES evaluation report for fastener.

END OF SECTION 061000

SECTION 06402 - INTERIOR FINISH CARPENTRY

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
  - 1. Reception Desk
- B. Interior finish carpentry includes wood furring, blocking, shims, and hanging strips unless concealed within other construction before woodwork installation.

1.2 SUBMITTALS

- A. Product Data: For surfacing material, cabinet hardware and accessories and finishing materials and processes.
- B. Shop Drawings: Show location of each item, dimensioned plans and elevations, large-scale details, attachment devices, and other components.
- C. Samples:
  - 1. Plastic-laminates, for each type, color, pattern, and surface finish.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: Fabricator of woodwork.
- B. Quality Standard: Unless otherwise indicated, comply with AWI's "Architectural Woodwork Quality Standards."

1.4 PROJECT CONDITIONS

- A. Environmental Limitations: Do not deliver or install woodwork until building is enclosed, wet work is complete, and HVAC system is operating and maintaining temperature and relative humidity at occupancy levels during the remainder of the construction period.
- B. Field Measurements: Where woodwork is indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication, and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
  - 1. Locate concealed framing, blocking, and reinforcements that support woodwork by field measurements before being enclosed, and indicate measurements on Shop Drawings.

1.5 COORDINATION

- A. Coordinate sizes and locations of framing, blocking, furring, reinforcements, and other related units of Work specified in other Sections to ensure that interior architectural woodwork can be supported and installed as indicated.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Do not deliver woodwork until painting and similar operations that could damage woodwork have been completed in installation areas. If woodwork must be stored in other than installation areas, store only in areas where environmental conditions comply with requirements specified in "Project Condition" Article.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. General: Provide materials that comply with requirements of the AWI quality standard for each type of woodwork and quality grade specified, unless otherwise indicated.
- B. Wood Products: Comply with the following:
  - 1. Particleboard: Grade M-3 47# density engineered particleboard
- C. High-Pressure Decorative Laminate: NEMA LD 3, grades as indicated or, if not indicated, as required by woodwork quality standard.
  - 1. Manufacturers: Subject to compliance with requirements, provide high-pressure decorative laminates by Wilsonart International; Div. of Premark International, Inc.
  - 2. Color at Countertops: Wilsonart, Andorra Shadow 4998K-22, Antique Finish.
  - 3. Types and locations of High-Pressure Laminate:
    - a. High-Pressure Laminate: GP-28 at exposed surfaces, doors and drawer fronts.
    - b. High-Pressure Laminate: GP-50 at countertops.
- D. Adhesive for Bonding Plastic Laminate: PVA adhesive, set under pressure, or contact cement.

### 2.2 INSTALLATION MATERIALS

- A. Furring, Blocking, Shims, and Hanging Strips: Softwood or hardwood lumber, kiln-dried to less than 15 percent moisture content.
- B. Anchors: Select material, type, size and finish required for each substrate for secure anchorage. Provide non-ferrous metal or hot-dip galvanized anchors and inserts on inside face of exterior walls and elsewhere as required for corrosion resistance. Provide toothed-steel or led expansion sleeves for drilled-in-place anchors.
- C. Adhesives, General: Do not use adhesives that contain urea formaldehyde.
- D. Wire Grommets: Flush mounted metal desk grommet, with cap and sleeve.
  - 1. Doug Mockett model PS-3B with one slot cap and black oxide sleeve.
    - a. Color: as selected by Architect from Manufacturers full range.
  - 2. Architect approved equal.
- E. Metal support brackets: Powder coated or painted manufactured metal brackets capable of supporting minimum 450 pounds each, with anchors appropriate for substrate.
  - 1. RAKKS model EHR 1818
  - 2. Architect approved Equal.

### 2.3 FABRICATION

- A. General: Complete fabrication to maximum extent possible before shipment to Project site. Where necessary for fitting at site, provide allowance for scribing, trimming, and fitting.
  - 1. Fabricate to AWI Premium quality standards.
  - 2. Shop cut openings to maximum extent possible. Sand edges of cutouts to remove splinters and burrs. Seal edges of openings in countertops with a coat of varnish.
- B. Shop cut openings to maximum extent possible, to receive hardware, appliances, plumbing fixtures, electrical work, and similar items. Locate openings accurately and use templates or rough-in diagrams to produce accurately sized and shaped openings. Sand edges of cutouts to remove splinters and burrs.

- C. Wood Moisture Content: Comply with requirements of referenced quality standard for wood moisture content in relation to ambient relative humidity during fabrication and in installation areas.
- D. Fabricate woodwork to dimensions, profiles and details indicated.
- E. Complete fabrication, including assembly, finishing,, and hardware application, to maximum extent possible, before shipment to Project site. Disassemble components only as necessary for shipment and installation. Where necessary for fitting at site, provide ample allowance for scribing, trimming and fitting.

## 2.5 PLASTIC-LAMINATE COUNTERTOPS

- A. Quality Standard: Comply with AWI Section 400 requirements for high-pressure decorative laminate countertops.
- B. Grade: Premium.
- C. High-Pressure Decorative Laminate Grade: HGS, GP-50.
- D. Colors, Patterns, and Finishes: Provide materials and products that result in colors and textures of exposed laminate surfaces complying with the following requirements:
  - 1. Provide Architect's selections from manufacturer's full range of colors and finishes in the following categories:
    - a. Solid colors.
    - b. Patterns.
    - c. Wood grains.
- E. Edge Treatment: 3mm radiused PVC, machine applied with hot-melt adhesives.
- F. Core Material: M-3, 47 pound density engineered particleboard..

## PART 3 EXECUTION

### 3.1 INSTALLATION

- A. Before installation, condition woodwork to average prevailing humidity conditions in installation areas. Examine shop-fabricated work for completion and complete work as required, including removal of packing and backpriming.
- B. Grade: Install woodwork to comply with requirements for the same grade specified in Part 2 for fabrication of type of woodwork involved.
- C. Install woodwork level, plumb, true, and straight to a tolerance of 1/8 inch in 96 inches (3 mm in 2400 mm). Shim as required with concealed shims.
- D. Scribe and cut woodwork to fit adjoining work, refinish cut surfaces, and repair damaged finish at cuts.
- E. Anchor woodwork to anchors or blocking built in or directly attached to substrates. Secure with countersunk, concealed fasteners and blind nailing as required for complete installation. Use fine finishing nails or finishing screws for exposed fastening, countersunk and filled flush with woodwork and matching final finish if transparent finish is indicated.
- F. Countertops: Anchor securely by screwing through supports into underside of countertop. Caulk space between counter and wall with sealant specified in Division 7 Section "Joint Sealants."

3.2 ADJUSTING AND CLEANING

- A. Repair damaged and defective woodwork, where possible, to eliminate functional and visual defects; where not possible to repair, replace woodwork. Adjust joinery for uniform appearance.
- C. Clean woodwork on exposed and semi-exposed surfaces. Touch up shop-applied finishes to restore damaged or soiled areas.

END OF SECTION 062023

SECTION 064116 - PLASTIC-LAMINATE-CLAD ARCHITECTURAL CABINETS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Plastic-laminate-clad architectural cabinets.
2. Cabinet hardware and accessories.
3. Wood furring, blocking, shims, and hanging strips for installing plastic-laminate-clad architectural cabinets that are not concealed within other construction.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings:
  1. Include plans, elevations, sections, and attachment details.
  2. Apply AWI Quality Certification Program label to Shop Drawings.
- C. Samples: For each exposed product and for each color and texture specified.

1.3 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For manufacturer and Installer.
- B. Research reports.
- C. Field quality control reports.

1.4 CLOSEOUT SUBMITTALS

- A. Quality Standard Compliance Certificates: AWI Quality Certification Program certificates.

1.5 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: Employs skilled workers who custom fabricate products similar to those required for this Project and whose products have a record of successful in-service performance.
  1. Manufacturer's Certification: Licensed participant in AWI's Quality Certification Program.
- B. Installer Qualifications: Manufacturer of products.

PART 2 - PRODUCTS

2.1 PLASTIC-LAMINATE-CLAD ARCHITECTURAL CABINETS (**PLAM-1 & PLAM-2**).

- A. Refer to "Finish Material Legend" on drawing A3.01 for product information and A8.01 for location.
  1. Color/Texture/Pattern: As selected by Architect from manufacturer's full range.
- B. Quality Standard: Unless otherwise indicated, comply with the Architectural Woodwork Standards for grades of cabinets indicated for construction, finishes, installation, and other requirements.
  1. Provide labels and certificates from AWI certification program indicating that woodwork complies with requirements of grades specified.



- C. Architectural Woodwork Standards Grade: Economy.
- D. Type of Construction: Frameless.
- E. Door and Drawer-Front Style: Flush overlay.
  - 1. Reveal Dimension: As indicated.
- F. High-Pressure Decorative Laminate: NEMA LD 3, grades as indicated or if not indicated, as required by quality standard. Refer to A3.02 Material Legend.
  - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - a. Arborite.
    - b. Formica Corporation.
    - c. Lamin-Art, Inc.
    - d. Pionite; a Panolam Industries International, Inc. brand.
    - e. Wilsonart LLC.
- G. Laminate Cladding for Exposed Surfaces:
  - 1. Horizontal Surfaces: Grade HGS.
  - 2. Postformed Surfaces: Grade HGP.
  - 3. Vertical Surfaces: Grade HGS.
  - 4. Edges: PVC edge banding, 3.0 mm thick, matching laminate in color, pattern, and finish.
  - 5. Pattern Direction: Vertically for drawer fronts, doors, and fixed panels [As indicated].
- H. Concealed Backs of Panels with Exposed Plastic-Laminate Surfaces: High-pressure decorative laminate, NEMA LD 3, Grade BKL.
- I. Drawer Construction: Fabricate with exposed fronts fastened to subfront with mounting screws from interior of body.
  - 1. Join subfronts, backs, and sides with glued rabbeted joints supplemented by mechanical fasteners or glued dovetail joints.
- J. Colors, Patterns, and Finishes: Provide materials and products that result in colors and textures of exposed laminate surfaces complying with the following requirements:
  - 1. Refer to "Finish Legend" on drawing A3.2 for product information.

## 2.2 WOOD MATERIALS

- A. Wood Products: Provide materials that comply with requirements of referenced quality standard for each type of architectural cabinet and quality grade specified unless otherwise indicated.
  - 1. Wood Moisture Content: 5 to 10 percent.
- B. Composite Wood Products: Provide materials that comply with requirements of referenced quality standard for each type of architectural cabinet and quality grade specified unless otherwise indicated.
  - 1. Particleboard (Medium Density): ANSI A208.1, Grade M-2.
  - 2. Thermoset Decorative Panels: Particleboard or MDF finished with thermally fused, melamine-impregnated decorative paper and complying with requirements of NEMA LD 3, Grade VGL, for Test Methods 3.3, 3.4, 3.6, 3.8, and 3.10 that will be concealed from view after installation.

## 2.3 CABINET HARDWARE AND ACCESSORIES

- A. Frameless Concealed Hinges (European Type): ANSI/BHMA A156.9, B01602, 100 degrees of opening, self-closing.
- B. Wire Pulls: Back mounted, solid metal, 4 inches (100 mm) long, 5/16 inch (8 mm) in diameter.

- C. Adjustable Shelf Standards and Supports: ANSI/BHMA A156.9, B04071; with shelf rests, B04081.
- D. Shelf Rests: ANSI/BHMA A156.9, B04013; two-pin plastic with shelf hold-down clip.
- E. Drawer Slides: ANSI/BHMA A156.9.
  - 1. Grade 1 and Grade 2: Side mounted and extending under bottom edge of drawer.
    - a. Type: Full extension.
    - b. Material: Zinc-plated steel with polymer rollers.
  - 2. Grade 1HD-100 and Grade 1HD-200: Side mounted; full-extension type; zinc-plated-steel ball-bearing slides.
  - 3. For drawers not more than 3 inches (75 mm) high and not more than 24 inches (600 mm) wide, provide Grade 1.
  - 4. For drawers more than 3 inches (75 mm) high, but not more than 6 inches (150 mm) high and not more than 24 inches (600 mm) wide, provide Grade 1.
  - 5. For drawers more than 6 inches (150 mm) high or more than 24 inches (600 mm) wide, provide Grade 1HD-100.
- F. Door Locks: ANSI/BHMA A156.11, E07121.
- G. Drawer Locks: ANSI/BHMA A156.11, E07041.
- H. Door and Drawer Silencers: ANSI/BHMA A156.16, L03011.
- I. Exposed Hardware Finishes: For exposed hardware, provide finish that complies with ANSI/BHMA A156.18 for ANSI/BHMA finish number indicated.
  - 1. Satin Stainless Steel: ANSI/BHMA 630.
- J. For concealed hardware, provide manufacturer's standard finish that complies with product class requirements in ANSI/BHMA A156.9.

#### 2.4 MISCELLANEOUS MATERIALS

- A. Furring, Blocking, Shims, and Hanging Strips: Softwood or hardwood lumber, kiln-dried to less than 15 percent moisture content.
- B. Anchors: Select material, type, size, and finish required for each substrate for secure anchorage. Provide metal expansion sleeves or expansion bolts for post-installed anchors. Use nonferrous-metal or hot-dip galvanized anchors and inserts at inside face of exterior walls and at floors.
- C. Adhesive for Bonding Plastic Laminate: Unpigmented contact cement.
  - 1. Adhesive for Bonding Edges: Hot-melt adhesive or adhesive specified above for faces.

#### 2.5 FABRICATION

- A. Complete fabrication, including assembly and hardware application, to maximum extent possible before shipment to Project site. Disassemble components only as necessary for shipment and installation. Where necessary for fitting at site, provide ample allowance for scribing, trimming, and fitting.
- B. Shop-cut openings to maximum extent possible to receive hardware, appliances, electrical work, and similar items. Locate openings accurately and use templates or roughing-in diagrams to produce accurately sized and shaped openings. Sand edges of cutouts to remove splinters and burrs.

### PART 3 - EXECUTION

#### 3.1 INSTALLATION

- A. Before installation, condition cabinets to humidity conditions in installation areas for not less than 72 hours.

- B. Architectural Woodwork Standards Grade: Install cabinets to comply with quality standard grade of item to be installed.
- C. Anchor cabinets to anchors or blocking built in or directly attached to substrates. Secure with wafer-head cabinet installation screws.
- D. Install cabinets level, plumb, and true in line to a tolerance of 1/8 inch in 96 inches (3 mm in 2400 mm) using concealed shims.
  - 1. Scribe and cut cabinets to fit adjoining work, refinish cut surfaces, and repair damaged finish at cuts.
  - 2. Install cabinets without distortion so doors and drawers fit openings and are accurately aligned. Adjust hardware to center doors and drawers in openings and to provide unencumbered operation. Complete installation of hardware and accessory items as indicated.
  - 3. Fasten wall cabinets through back, near top and bottom, and at ends not more than 16 inches (400 mm) o.c. with No. 10 wafer-head screws sized for not less than 1-1/2-inch (38-mm) penetration into wood framing, blocking, or hanging strips.

### 3.2 FIELD QUALITY CONTROL

- A. Inspections: Provide inspection of installed Work through AWI's Quality Certification Program certifying that woodwork, including installation, complies with requirements of the Architectural Woodwork Standards for the specified grade.
  - 1. Inspection entity shall prepare and submit report of inspection.

END OF SECTION 064116

## SECTION 079200 - JOINT SEALANTS

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This Section includes joint sealants for the following applications, including those specified by reference to this Section and following applications:
1. Exterior joints in the following vertical surfaces and horizontal nontraffic surfaces:
    - a. Joints between different materials.
    - b. Perimeter joints between materials and frames of doors and louvers.
    - c. Other joints as indicated.
  2. Exterior joints in the following horizontal traffic surfaces:
    - a. Isolation and contraction joints in cast-in-place concrete slabs.
    - b. Other joints as indicated.
  3. Interior joints in the following vertical surfaces and horizontal nontraffic surfaces:
    - a. Tile control and expansion joints.
    - b. Vertical joints on exposed surfaces of interior ceramic tile and glazed concrete masonry walls.
    - c. Perimeter joints between interior wall surfaces and frames of interior doors and windows.
    - d. Joints between plumbing fixtures and adjoining walls, floors, and counters.
    - e. Other joints as indicated.
  4. Interior joints in the following horizontal traffic surfaces:
    - a. Isolation joints in cast-in-place concrete slabs.
    - b. Joints in tile flooring.
    - c. Other joints as indicated.

#### 1.2 PERFORMANCE REQUIREMENTS

- A. Provide elastomeric joint sealants that establish and maintain watertight and airtight continuous joint seals without staining or deteriorating joint substrates.
- B. Provide joint sealants for interior applications that establish and maintain airtight and water-resistant continuous joint seals without staining or deteriorating joint substrates.

#### 1.3 SUBMITTALS

- A. Product Data: For each joint-sealant product indicated.
- B. Samples: For each type and color of joint sealant required, provide Samples with joint sealants in 1/2-inch- (13-mm-) wide joints formed between two 6-inch- (150-mm-) long strips of material matching the appearance of exposed surfaces adjacent to joint sealants.

#### 1.4 QUALITY ASSURANCE

- A. Preconstruction Field-Adhesion Testing: Before installing elastomeric sealants, field test their adhesion to Project joint substrates according to the method in ASTM C 1193 that is appropriate for the types of Project joints.

#### 1.5 WARRANTY

- A. Special Installer's Warranty: Installer's standard form in which Installer agrees to repair or replace elastomeric joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
1. Warranty Period: Two years from date of Substantial Completion.

- B. Special Manufacturer's Warranty: Manufacturer's standard form in which elastomeric sealant manufacturer agrees to furnish elastomeric joint sealants to repair or replace those that do not comply with performance and other requirements specified in this Section within specified warranty period.
  - 1. Warranty Period: 10 years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Products: Subject to compliance with requirements, provide one of the products listed in other Part 2 articles.

### 2.2 MATERIALS, GENERAL

- A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer, based on testing and field experience.
- B. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range.

### 2.3 ELASTOMERIC JOINT SEALANTS

- A. Elastomeric Sealants: Comply with ASTM C 920 and other requirements indicated for each liquid-applied chemically curing sealant specified, including those referencing ASTM C 920 classifications for type, grade, class, and uses related to exposure and joint substrates.
- B. Stain-Test-Response Characteristics: Where elastomeric sealants are specified to be nonstaining to porous substrates, provide products that have undergone testing according to ASTM C 1248 and have not stained porous joint substrates indicated for Project.
- C. Suitability for Immersion in Liquids. Where elastomeric sealants are indicated for Use I for joints that will be continuously immersed in liquids, provide products that have undergone testing according to ASTM C 1247 and qualify for the length of exposure indicated by reference to ASTM C 920 for Class 1 or 2. Liquid used for testing sealants is deionized water, unless otherwise indicated.
- D. Low-Modulus Neutral -Curing Polyurethane Sealant: Where joint sealants of this type are indicated, provide products complying with the following:
  - 1. Available Products:
    - a. Pecora Corporation; Dynatrol I-XL.
    - b. Tremco; DyMonic.
    - c. Tremco; Vulkem 921.
  - 2. Type and Grade: S (single component) and NS (nonsag).
  - 3. Class: 25.
  - 4. Use Related to Exposure: NT (nontraffic).
  - 5. Uses Related to Joint Substrates: M, G, A, and, as applicable to joint substrates indicated, O.
    - a. Coated glass, aluminum coated with a high-performance coating, color anodic aluminum, galvanized steel, brick, limestone, marble, granite, plastic, tile, wood.
- E. Single-Component Mildew-Resistant Acid-Curing Silicone Sealant: Where joint sealants of this type are indicated, provide products formulated with fungicide that are intended for sealing interior ceramic tile joints and other nonporous substrates that are subject to in-service exposures of high humidity and temperature extremes, and that comply with the following:

1. Available Products:
    - a. Dow Corning Corporation; 786 Mildew Resistant.
    - b. GE Silicones; Sanitary SCS1700.
    - c. Tremco; Tremsil 200 White.
  2. Type and Grade: S (single component) and NS (nonsag).
  3. Class: 25.
  4. Use Related to Exposure: NT (nontraffic).
  5. Uses Related to Joint Substrates: G, A, and, as applicable to joint substrates indicated,
    - a. Coated glass, aluminum coated with a high-performance coating, color anodic aluminum, galvanized steel, marble, granite, plastic and tile.
- F. Single-Component Pourable Urethane Sealant: Where joint sealants of this type are indicated, provide products complying with the following:
1. Available Products:
    - a. Pecora Corporation; Urexpan NR-201.
    - b. Polymeric Systems Inc.; Flexiprene 952.
    - c. Tremco; Tremflex S/L.
    - d. Tremco; Vulkem 45.
    - e. Sonneborn Building Products, Div., ChemRex Inc.; SL 1.
  2. Type and Grade: S (single component) and P (pourable).
  3. Class: 25.
  4. Use Related to Exposure: T (traffic) and NT (nontraffic).
  5. Uses Related to Joint Substrates: M, A, and, as applicable to joint substrates indicated,
    - a. Color anodic aluminum, aluminum coated with a high-performance coating, galvanized steel, brick, granite, marble, ceramic tile and wood.

#### 2.4 JOINT-SEALANT BACKING

- A. General: Provide sealant backings of material and type that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.
- B. Cylindrical Sealant Backings: ASTM C 1330, Type C (closed-cell material with a surface skin), O (open-cell material), B (bicellular material with a surface skin) or any of the preceding types, 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:
- C. Elastomeric Tubing Sealant Backings: Neoprene, butyl, EPDM, or silicone tubing complying with ASTM D 1056, nonabsorbent to water and gas, and capable of remaining resilient at temperatures down to minus 26 deg F (minus 32 deg C). 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.

#### 2.5 MISCELLANEOUS MATERIALS

- A. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.

- B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants to joint substrates.
- C. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants.
  - 1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant.
    - a. Clean porous joint substrate surfaces by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air.
  - 2. Remove laitance and form-release agents from concrete.
    - a. Clean nonporous surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants.
- B. Joint Priming: Prime joint substrates, where recommended in writing by joint-sealant manufacturer, based on preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.
- C. Masking Tape: Use masking tape where required to prevent contact of sealant with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

### 3.2 INSTALLATION

- A. General: All dissimilar materials are to be caulked.
- B. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- C. Install sealant backings of type indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
  - 1. Do not leave gaps between ends of sealant backings.
  - 2. Do not stretch, twist, puncture, or tear sealant backings.
  - 3. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.
- D. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.
- E. Install sealants using proven techniques that comply with the following and at the same time backings are installed:
  - 1. Place sealants so they directly contact and fully wet joint substrates.

2. Completely fill recesses in each joint configuration.
  3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- F. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.
1. Remove excess sealant from surfaces adjacent to joints.
  2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
  3. Provide concave joint configuration per Figure 5A in ASTM C 1193, unless otherwise indicated.
- G. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

### 3.3 JOINT-SEALANT SCHEDULE

- A. Joint-Sealant Application: Exterior horizontal nontraffic and traffic, isolation and contraction joints in cast-in-place concrete slabs.
1. Joint Sealant: Single-component pourable urethane sealant.
  2. Joint-Sealant Color: As selected by Architect from Manufacturers full color range.
- B. Joint-Sealant Application: Exterior vertical and horizontal joints between different materials.
1. Joint Sealant: Low- Modulus Neutral-Curing Polyurethane Sealant.
  2. Joint-Sealant Color: As selected by Architect from Manufacturers full color range.
- C. Joint-Sealant Application: Exterior perimeter joints between materials and frames of doors and louvers.
1. Joint Sealant: Low- Modulus Neutral-Curing Polyurethane Sealant.
  2. Joint-Sealant Color: As selected by Architect from Manufacturers full color range.
- D. Joint-Sealant Application: Interior perimeter joints of exterior openings.
1. Joint Sealant: Low-Modulus Neutral-Curing Polyurethane Sealant.
  2. Joint-Sealant Color: As selected by Architect from Manufacturers full color range.
- E. Joint-Sealant Application: Interior ceramic tile joints in horizontal traffic surfaces.
1. Joint Sealant: Single-component, neutral curing, 100% silicone sealant. Same manufacturer as ceramic tile grout manufacturer.
  2. Joint-Sealant Color: As selected by Architect from Manufacturers full color range to match grout color.
- F. Joint-Sealant Application: Vertical interior joints in ceramic tile or glazed CMU walls, where non-porous surface wraps into joint.
1. Joint Sealant: Single-component mildew-resistant acid-curing silicone sealant.
  2. Joint Sealant Color: As selected by Architect from Manufacturers full color range to match mortar or grout color of walls.
- G. Joint-Sealant Application: Interior joints between plumbing fixtures and adjoining walls, floors, and counters.
1. Joint Sealant: Single-component mildew-resistant acid-curing silicone sealant.
  2. Joint-Sealant Color: As selected by Architect from Manufacturers full color range.



- H. Joint-Sealant Application: Vertical interior control / expansion joints joints in glazed CMU walls, where non-porous surface is face shell only, and porous concrete masonry or poured concrete are the primary bonding surfaces.
1. Joint Sealant: Dow Corning 790 Single-component neutral curing silicone sealant.
  2. Joint Sealant Color: As selected by Architect from Manufacturers full color range to match mortar or grout color of walls.
  3. Joint Sealant Primer: Dow Corning 1200 OS primer: where sealant ajoins non-porous substrates, or where recommended by sealant manufacturer.

END OF SECTION 079200

SECTION 081113 - HOLLOW METAL DOORS AND FRAMES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes hollow metal doors and frames.

1.2 SUBMITTALS

- A. Product Data: For each product indicated. Include door designation, type, level and model, material description, label compliance, fire-resistance ratings, and finishes.
- B. Shop Drawings: Include elevations, door edge details, frame profiles, metal thicknesses, preparations for hardware, and other details.
- C. Door Schedule. Use same reference designations indicated on Drawings.

1.3 QUALITY ASSURANCE

- A. Steel Door and Frame Standard: Comply with ANSI A 250.8, unless more stringent requirements are indicated.
- B. Fire-Rated Door Assemblies: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire-protection ratings indicated, based on testing according to NFPA 252.
- C. Fire-Rated, Borrowed-Lite Assemblies: Complying with NFPA 80 and listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction for fire-protection ratings indicated, based on testing according to NFPA 257 or UL 9.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Amweld International, LLC.
  - 2. Ceco Door Products; an Assa Abloy Group Company.
  - 3. Curries Company; an Assa Abloy Group Company.
  - 4. Mesker Door, Inc.
  - 5. Pioneer Industries Inc.
  - 6. Republic Doors and Frames.
  - 7. Steelcraft; an Ingersoll-Rand Company.

2.2 MATERIALS

- A. Hot-Rolled Steel Sheets: ASTM A 569/A 569M, Commercial Steel (CS), Type B; free of scale, pitting, or surface defects; pickled and oiled.
- B. Cold-Rolled Steel Sheets: ASTM A 366/A 366M, Commercial Steel (CS), or ASTM A 620/A 620M, Drawing Steel (DS), Type B; stretcher-leveled standard of flatness.
- C. Metallic-Coated Steel Sheets: ASTM A 653/A 653M, Commercial Steel (CS), Type B, with an A40 (ZF120) zinc-iron-alloy (galvannealed) coating; stretcher-leveled standard of flatness.

## 2.3 DOORS

- A. Interior Doors: Complying with ANSI 250.8 for level and model and ANSI A250.4 for physical-endurance level indicated.
  - 1. Interior Doors (Extra-Heavy-Duty Doors) Level 3 and Physical Performance Level A, Model 1 (Full Flush) 0.053-inch-thick (16 gage).
  - 2. Interior Doors (Heavy-Duty Doors)

## 2.4 FRAMES

- A. General: ANSI A250.8; conceal fastenings, unless otherwise indicated.
- B. Frame Steel Sheet Thickness:
  - 1. Interior Frames of minimum 0.053-inch-thick (16 gage) for level 3 steel doors and wood doors.
- C. Sidelite and Transom Frames: Fabricated from same thickness material as adjacent door frame.
- D. Construction: Full profile welded.
- E. Door Silencers: Three silencers on single-door frames and two silencers on double-door frames.
- F. Jamb Anchors:
  - 1. Masonry Type: Adjustable strap-and-stirrup or T-shaped anchors to suit frame size, not less than 0.042 inch (1.0 mm) thick, with corrugated or perforated straps not less than 2 inches (51 mm) wide by 10 inches (254 mm) long; or wire anchors not less than 0.177 inch (4.5 mm) thick.
  - 2. Stud-Wall Type: Designed to engage stud, welded to back of frames; not less than 0.042 inch (1.0 mm) thick.
- G. Inserts, Bolts, and Fasteners: Manufacturer's standard units. Zinc-coat items that are to be built into exterior walls according to ASTM A 153/A 153M, Class C or D as applicable.
- H. Grout: Where required in masonry construction, as specified in Division 4 "Unit Masonry."

## 2.5 FABRICATION

- A. General: Fabricate steel door and frame units to comply with ANSI A250.8 free from defects including warp and buckle. Where practical, fit and assemble units in manufacturer's plant.
- B. Interior Door and Panel Faces: Fabricate exposed faces of doors and panels, including stiles and rails of nonflush units, from cold-rolled steel sheet.
- C. Core Construction: Manufacturer's standard core construction that produces a door complying with SDI standards.
- D. Clearances for Non-Fire-Rated Doors: Not more than 1/8 inch (3.2 mm) at jambs and heads, except not more than 1/4 inch (6.4 mm) between pairs of doors. Not more than 3/4 inch (19 mm) at bottom.
- E. Clearances for Fire-Rated Doors: As required by NFPA 80.
- F. Door-Edge Profile: Square edge, unless beveled edge is indicated.
- G. Tolerances: Comply with SDI 117.
- H. Prepare doors and frames to receive mortised and concealed hardware according to final door hardware schedule and templates provided by hardware supplier. Comply with applicable requirements in ANSI A250.6 and ANSI A115 Series specifications for door and frame preparation for hardware.

- I. Frame Construction:
    - 1. Fabricate frames with mitered or coped and continuously welded corners and seamless face joints. Provide temporary spreader bars.
    - 2. Provide terminated stops, where indicated.
  - J. Reinforce doors and frames to receive surface-applied hardware. Drilling and tapping for surface-applied hardware may be done at Project site.
  - K. Locate hardware as indicated or, if not indicated, according to ANSI A250.8.
  - L. Glazing Stops: Manufacturer's standard, formed from 0.032-inch- (0.8-mm-) thick steel sheet.
    - 1. Provide nonremovable stops on secure side of interior doors for glass, louvers, and other panels in doors.
    - 2. Provide screw-applied, removable, glazing stops on inside of glass, louvers, and other panels in doors.
  - M. Astragals: As required by NFPA 80 to provide fire ratings indicated.
- 2.6 FINISHES
- A. Prime Finish: Manufacturer's standard, factory-applied coat of rust-inhibiting primer complying with ANSI A250.10 for acceptance criteria.

### PART 3 - EXECUTION

#### 3.1 INSTALLATION

- A. Placing Frames: Comply with provisions in SDI 105, unless otherwise indicated. Set frames accurately in position, plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is completed, remove temporary braces and spreaders, leaving surfaces smooth and undamaged.
  - 1. Wall Anchors: Provide at least three anchors per jamb. For openings 90 inches (2286 mm) or more in height, install an additional anchor at hinge and strike jambs.
  - 2. Fire-Rated Frames: Install according to NFPA 80.
- B. Door Installation: Comply with ANSI A250.8. Shim as necessary to comply with SDI 122 and ANSI/DHI A115.1G.
  - 1. Fire-Rated Doors: Install within clearances specified in NFPA 80.
  - 2. Smoke Control Doors: Install to comply with NFPA 105.
- C. Prime Coat Touchup: Immediately after installation, sand smooth any rusted or damaged areas of prime coat and apply touchup of compatible air-drying primer.
- D. After installation, remove protective wrappings from doors and frames and touch up prime coat with compatible air-drying primer.

END OF SECTION 081113

SECTION 081416 - FLUSH WOOD DOORS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
  - 1. Solid-core doors with wood-veneer faces, factory finished.
  - 2. Factory fitting flush wood doors to frames and factory machining for hardware.

1.2 SUBMITTALS

- A. Product Data: For each type of door indicated. Include factory-finishing specifications.
- B. Shop Drawings: Indicate location, size, and hand of each door; elevation of each kind of door; construction details not covered in Product Data; location and extent of hardware blocking; and other pertinent data.
- C. Samples: For factory-finished doors.

1.3 QUALITY ASSURANCE

- A. Quality Standard: In addition to requirements specified, comply with AWI's "Architectural Woodwork Quality Standards Illustrated."

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Algoma Hardwoods, Inc.
  - 2. Buell Door Company Inc.
  - 3. Eggers Industries.
  - 4. Graham
  - 5. Maiman
  - 6. Marshfield Door Systems, Inc.
  - 7. Mohawk Flush Doors
  - 8. Oshkosh Architectural Door Company.
  - 9. Simpson Door Company.
  - 10. VT Industries Inc.

2.2 DOOR CONSTRUCTION, GENERAL

- A. Low-Emitting Materials: Provide doors made with adhesives and composite wood products that do not contain urea formaldehyde.
- B. Particleboard-Core Doors:
  - 1. Particleboard: ANSI A208.1, Grade LD-2, made with binder containing no urea-formaldehyde resin.
  - 2. Blocking: Provide wood blocking in particleboard-core doors as needed to eliminate through-bolting hardware.
  - 3. Provide doors with either glued-wood-stave or structural-composite-lumber cores instead of particleboard cores for doors indicated to receive exit devices.

## 2.3 VENEERED-FACED DOORS FOR TRANSPARENT FINISH

- A. Interior Solid-Core Doors:
  - 1. Grade: Premium, with Grade AA faces.
  - 2. Species: Red Oak
  - 3. Cut: Plain Sliced
  - 4. Match between Veneer Leaves: Pleasing match.
  - 5. Assembly of Veneer Leaves on Door Faces: Center Balance match.
  - 6. Core: Particleboard
  - 7. Finish: Factory Finish.

## 2.4 FABRICATION

- A. Factory fit doors to suit frame-opening sizes indicated. Comply with clearance requirements of referenced quality standard for fitting unless otherwise indicated.
- B. Factory machine doors for hardware that is not surface applied.

## 2.5 FACTORY FINISHING

- A. General: Complete fabrication, including fitting doors for openings and machining for hardware that is not surface applied, before finishing.
  - 1. Finish faces, all four edges, edges of cutouts, and mortises. Stains and fillers may be omitted on top and bottom edges, edges of cutouts, and mortises.
- B. Transparent Finish:
  - 1. Grade: Premium.
  - 2. Finish: AWI catalyzed polyurethane system.
  - 3. Stain color and sheen: Match existing building doors

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Hardware: For installation, see Division 08 Section "Door Hardware."
- B. Installation Instructions: Install doors to comply with manufacturer's written instructions and the referenced quality standard, and as indicated.
  - 1. Install fire-rated doors according to NFPA 80.
- C. Job-Fitted Doors: Align and fit doors in frames with uniform clearances and bevels; do not trim stiles and rails in excess of limits set by manufacturer or permitted for fire-rated doors. Machine doors for hardware. Seal edges of doors, edges of cutouts, and mortises after fitting and machining.
  - 1. Clearances: Provide 1/8 inch (3.2 mm) at heads, jambs, and between pairs of doors. Provide 1/8 inch (3.2 mm) from bottom of door to top of decorative floor finish or covering unless otherwise indicated. Where threshold is shown or scheduled, provide 1/4 inch (6.4 mm) from bottom of door to top of threshold unless otherwise indicated.
- D. Factory-Fitted Doors: Align in frames for uniform clearance at each edge.

END OF SECTION 081416

SECTION 087100 - DOOR HARDWARE

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes swinging door hardware.
- B. Related Sections include the following:
  - 1. Division 8 - Section "Steel Doors and Frames"
  - 2. Division 8 - Section "Flush Wood Doors"
  - 3. Division 8 - Section "Aluminum-Framed Entrances and Storefronts"
  - 4. Electrical Divisions - Electrical rough-in, conduit junction boxes, wiring, primary power and final hook-up of all finish hardware components requiring electrical connections.
- C. Hardware Allowance: Contractor to carry the following allowances for door hardware. Card Readers and power supplies to be provided by Owner's Security Firm. Electric Strikes to be included in contract.
  - 1. Interior double doors: \$4,000 each
  - 2. Interior Single Doors: \$1,500 each

1.2 QUALITY ASSURANCE

- A. Requirements of Regulatory Agencies:
  - 1. Furnish finish hardware to comply with the requirements of laws, codes, ordinances, and regulations of the governmental authorities having jurisdiction where such requirements exceed the requirements of the Specifications.
  - 2. Furnish finish hardware to comply with the requirements of the regulations for public building accommodations for physically handicapped persons of the governmental authority having jurisdiction and to comply with Americans with Disabilities Act.
  - 3. Provide hardware for fire-rated openings in compliance with NFPA 80 and state and local building code requirements. Provide only hardware that has been tested and listed by UL for types and sizes of doors required and complies with requirements of door and door frame labels.
  - 4. Where emergency exit devices are required on fire-rated doors that carry supplementary marking on the doors UL labels indicating "Fire Door to be equipped with Fire Exit Hardware" provide UL label on exit devices indicating "Fire Exit Hardware".
- B. Hardware Supplier:
  - 1. Shall be an established firm dealing in contract builders' hardware. He must have adequate inventory, qualified personnel on staff and be located within 100 miles of the project. Only domestic manufacturers are acceptable and the distributor must be a factory-authorized dealer for all materials required.
  - 2. AHC: The supplier shall be or have in employment an Architectural Hardware Consultant. (AHC) who will attend keying conference, consult with owner and architect relative to hardware and keying, develop hardware sets.
- C. Pre-construction Meeting:
  - 1. Prior to development of the Hardware Schedule, a Finish Hardware Meeting will be held at the Project site. The Construction Manager and the Hardware Supplier's personnel, directly responsible for preparing the Hardware Schedule, shall meet with the Architect and the Owner's facilities staff to review hardware and keying for the project.

- D. Manufacturer:
  - 1. Obtain each type of hardware (latch and lock sets, hinges, closers, etc.) from a single manufacturer, although several may be indicated as offering products complying with requirements.
  - 2. Provide electrified door hardware from same manufacturer as mechanical door hardware, unless otherwise indicated.

### 1.3 SUBMITTALS

- A. Hardware Schedule
  - 1. Submit proper number of Hardware Schedules to allow the Architect to retain two copies for his use, plus the number of copies required by the Contractor for his distribution and use. In any event, do not submit more than six copies. If submitting electronically, submit a single copy. Include the following:
    - 2. Opening Description: Single or pair, number, room locations, hand, active leaf, degree of swing, size, door material, frame material, and UL listing.
    - 3. Hardware Description: Quantity, category, product number, fasteners, and finish.
    - 4. Headings that refer to the specified Hardware Set Numbers.
    - 5. Scheduling Sequence shown in Hardware Sets.
    - 6. Product data of each hardware item, and shop drawings where required, for special conditions and specialty hardware.
    - 7. Electrified hardware system operation description.
    - 8. 8-1/2 x 11 inch sheets
    - 9. U.S. Standard Finish symbols or BHMA Finish symbols.
- B. Product Data:
  - 1. Submit, in booklet form using supplier's schedule covers as binders. Product data of items of hardware listed in supplier's schedule.
  - 2. Submit product data concurrently with hardware schedule.
- C. Samples:
  - 1. Prior to submittal of the final hardware schedule and prior to final ordering of finish hardware, submit one sample, if required, of each type of exposed hardware unit, finished as required and tagged with full description for coordination with schedule.
  - 2. Samples will be returned to the supplier. Units, which are acceptable and remain undamaged through submittal, review and field comparison procedures may, after final check of operation, be used in the work, within limitations of keying coordination requirements.
- D. Elevation and Wiring Drawings:
  - 1. Submit elevation drawing showing relationship of all electrical and pneumatic hardware components to door and frame. Indicate number and gage of wires required.
  - 2. Submit wiring drawing showing point to point wire hook up for all components.
  - 3. Submit system operations descriptions for each type of opening; describe each possible condition.
- E. Submit to Construction Manager, two copies each of parts and service manuals and two each of any special installation or adjustment tools. Include for locksets, exit devices, door closers and any electrical products.

### 1.4 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Label each item of hardware with the appropriate door number and Hardware Schedule heading number, and deliver to the installer so designated by the contractor.

### 1.5 WARRANTY



- A. Mortise locksets shall carry manufacturer's 3-year warranty against manufacturing defects and workmanship.
- B. Closers shall carry manufacturer's 10-year warranty against manufacturing defects and workmanship.
- C. Exit devices shall carry manufacturer's 3-year warranty against manufacturing defects and workmanship.
- D. Continuous gear hinges shall carry manufacturer's Lifetime warranty to be free from defects in material and workmanship.
- E. Balance of items shall carry a manufacturer's 1-year warranty against manufacturing defects and workmanship.
- F. During the warranty period, replace defective work, including labor, materials and other costs incidental to the work. Inspect the work within 24 hours after receipt of notice from the Owner. Replace work found to be defective as defined in the Contract Documents.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURER

- A. Work of this contract occurs over several buildings within the district. General intent is to match the manufacturers and products with building standard. Within each building, provide products by same manufacturer.

### 2.2 PRODUCTS

- B. Hinges
  - 1. Furnish hinges of cuts and size as listed in Hardware Sets.
  - 2. Where hinges are specified at openings with "existing frames", provide size and weight to match existing preparations, regardless of the hinge specified in the Hardware Set.
  - 3. Numbers used are Ives. Equal products of BHMA members are acceptable.
- C. Continuous Gear Hinge: Use at exterior FRP doors.
  - 1. 6063-T6 aluminum alloy, anodized finish (cap on entire hinge painted if specified). Manufacture to template, uncut hinges non-handed, pinless assembly, three interlocking extrusions, full height of door and frame, lubricated polyacetal thrust bearing, fasteners 410 stainless steel plated and hardened. All hinge profiles to be manufactured to template bearing locations, with standard duty bearing configurations at 5-1/8" spacing with a minimum of 16 bearings; and heavy duty at 2-9/16" spacing with a minimum of 32 bearings. Anodizing of material shall be done after fabrication of components so that all bearing slots are anodized.
  - 2. Length: 1" less than door opening height. Fastener 12-24 x 1/2" #3 Phillips keen form stainless steel self-tapping at aluminum and hollow metal doors, 12- 1/2" #3 Philips, flathead full thread at wood doors.
  - 3. All hinges shall have passed 25 million (25,000,000) cycle test.
  - 4. Furnish fire rated hinges "FR" at labeled opening.
  - 5. Numbers used are Select Products, Ltd., Kalamazoo, Michigan.
    - a. For Aluminum and FRP frames;
      - 1. Select Products Ltd. SL11HD

D. LOCKSETS AND LATCHSETS - MORTISE TYPE

1. Locksets shall be manufactured from heavy gauge steel, minimum lockcase thickness 1/8", containing components of steel with a zinc dichromate plating for corrosion resistance.
2. Locks are to have a standard 2 3/4" backset with a full 3/4" throw two-piece stainless steel mechanical anti-friction latchbolt. Deadbolt shall be a full 1" throw, constructed of stainless steel.
3. Lockcase shall be easily handed without chassis disassembly by removing handing screw on lockcase and installing in opposite location on reverse side. Changing of door hand bevel from standard to reverse hand shall be done by removing the lockcase scalp plate, and pulling and rotating the latchbolt 180 degrees.
4. Lock trim shall be through-bolted to the door to assure correct alignment and proper operation. Lever trim shall have external spring cage mechanism to assist in support of the lever weight. Thumb turns shall have "EZ" thumbturn equal to IR-Schlage L583-363.
5. Function numbers are IR-Schlage.
  - a. IR-Schlage L-9000
  - b. Best 35H
  - c. Sargent 8200
6. Trim:
  - a. IR-Schlage 93N
  - b. Best 3N
  - c. Sargent LW1H
7. Provide strikes with extended lips where required to protect trim from being marred by latch bolt. Provide strike lips that do not project more than 1/8" beyond door frame trim at single doors and have 7/8" lip to center at pairs of 1-3/4" doors. Provide wrought box strikes on all locks and latches.

E. EXIT DEVICES

1. Exit devices shall be touchpad style, fabricated of brass, bronze, stainless steel, or aluminum, plated to the standard architectural finishes to match the balance of the door hardware.
2. All exit devices shall incorporate a fluid damper, which decelerates the touchpad on its return stroke and eliminates noise associated with exit device operation. Touchpad shall extend a minimum of one half of the door width. All latchbolts to be deadlatching type, with a self-lubricating coating to reduce wear. End-cap will have two-point attachment to the mounting bracket.. Touchpad shall match exit device finish, and shall be stainless steel for US26, US26D, US28, US32, and US32D finishes. Only compression springs will be used in devices, latches, and outside trims or controls.
3. Strikes shall be roller type and come complete with a locking plate to prevent movement.
4. All exit devices shall have passed a 1 million (1,000,000) cycle test based on ANSI A156.3, 1994, Grade 1 test standards and certified by and independent testing lab.
5. Plastic templates shall be included with each exit device to facilitate a quick, easy and accurate installation.
6. All mortise exit devices shall have passed a 10 million (10,000,000) cycle test based on ANSI A156.3, 1944, Grade 1 test standards and certified by an independent testing lab.
7. Provide cylinder dogging on panic exit hardware where noted in hardware sets.
8. Exit devices shall be UL listed panic exit hardware. All exit devices for fire rated openings shall be UL labeled fire exit hardware.

9. Lever trim for exit devices shall be vandal-resistant type, which will travel to a 90-degree down position when more than 35 pounds of torque are applied, and which can easily be re-set.
  10. Function numbers are IR-Von Duprin.
    - a. IR Von Duprin 98 and 35 Series.
    - b. Precision
    - c. Sargent
  11. Trim:
    - a. Match existing building standard.
    - b. Levers to match lockset design where specified.
- G. CLOSERS
1. Door closers shall have fully hydraulic, full rack and pinion action with a high strength cast iron cylinder. Cylinder body shall be 1 ½" in diameter, and double heat treated pinion shall be 11/16" in diameter with double D slab drive arm connection.
  2. Manufacturer:
    - a. LCN 4040XP
- H. OVERHEAD HOLDERS and STOPS
1. Size per manufacturer's selector chart. Plastic end caps, hold open mechanisms and shock blocks are not allowed. End caps must be finished same as balance of unit.
  2. Manufacture products using base material of Brass/Bronze for US3, US4, & US10B finished products and 300 Stainless Steel for US32 & US32D finished products.
  3. Type, function, and fasteners must be the same as Glynn-Johnson specified. Size per manufacturer's selector chart.
    - a. IR-Glynn-Johnson
    - b. Equal products of any BHMA manufacturer
- I. KICK PLATES
1. Furnish .050 inches thick 10" high x door width less 2" at single doors and less 1" at pairs. Where glass or louvers prevent this height, supply with height equal to height of bottom rail less
  2. Kickplates shall be drilled and counter sunk for oval head, counter sunk screws. Pan head not acceptable.
  3. Any BHMA manufacturing product meeting above is acceptable.
- J. WALL STOPS
1. Length to exceed projection of all other hardware. Provide with threaded studs and expansion shields for masonry wall construction. Install with slope at top.
    - a. IR-Ives WS33
    - b. BHMA L12011 or L12021
- L. THRESHOLDS: Provide at exterior doors.
1. 1/2-inch high - 5-inch wide. Cope at jambs.
  2. Furnish full wall opening width when frames are recessed.
  3. Cope in front of mullions if thresholds project beyond door faces.
  4. Furnish with non-ferrous Stainless Steel Screws and Lead Anchors.
    - a. National Guard as listed in sets
    - b. Equal by Zero, Reese or Pemko
- M. DOOR SWEEPS: Provide at exterior doors.
1. Surface Sweeps:

- a. National Guard as listed in sets.
- b. Equal by Zero, Reese or Pemko

N. SOUND SEAL

- 1. Adjustable type perimeter seal.
  - a. National Guard as listed in sets.
  - b. Equal by Zero, Reese or Pemko

Q. ELECTRIC STRIKES:

- 1. For cross-corridor egress doors with exit devices:
  - a. HES 9600
- 2. For office -to- vestibule doors:
  - a. HES 1006

R. FASTENERS

- 1. Furnish fasteners of the proper type, size, quantity and finish. Use machine screws and expansion shields for attaching hardware to concrete or masonry, and wall grip inserts at hollow wall construction.. Furnish machine screws for attachment to reinforced hollow metal doors and frames and reinforced aluminum doors and frames. Furnish full thread wood screws for attachment to solid wood doors and frames. "TEK" type screws are not acceptable.
- 2. Sex bolts will not be permitted on reinforced metal doors or wood doors where blocking is specified.

2.3 FINISHES

- A. Match Building Standard.

2.4 TEMPLATES AND HARDWARE LOCATION

- A. Furnish hardware made to template. Supply required templates and hardware locations to the door and frame manufacturers.
- B. Furnish metal template to frame/door supplier for continuous hinge.
- C. Refer to Article 3.1 B2, Locations, and coordinate with templates.

2.5 CYLINDERS KEY CONTROL AND KEYING

- A. All cylinders for each building will be supplied by one supplier regardless of door type and location.
- C. Final cores will be provided by the owner.
- D. Provide disposable or keyed construction cores for use during construction period as specified in sets.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. General:
  - 1. Install hardware according to manufacturers installations and to manufacturers template dimensions. Attach all items of finish hardware to doors, frames, walls, etc. with fasteners furnished and required by the manufacture of the item.
  - 2. Provide blocking/reinforcement for all wall mounted hardware.

3. Reinforced hollow metal doors and frames and reinforced aluminum door and frames: drilled and tapped machine screws.
4. Solid wood doors and frames: full thread wood screws. Drill pilot holes before inserting screws.
5. Continuous gear hinges attached to hollow metal doors and frames and aluminum doors and frames: 12-24 x 1/2" #3 Phillips Keenform self-tapping. Use #13 or 3/16 drill for pilot.
6. Continuous Gear Hinges require continuous mortar guards of foam or cardboard 1/2" thick x frame height, applied with construction adhesive.
7. Install weather-strip gasket prior to parallel arm closer bracket, rim exit device or any stop mounted hardware. Gasket to provide a continuous seal around perimeter of door opening. Allow for gasket when installing finish hardware. Door closers will require special templating. Exit devices will require adjustment in backset.

B. Locations:

1. Dimensions are from finish floor to center line of items.
2. Include this list in Hardware Schedule.

CATEGORY	DIMENSION
Hinges	Door Manufacturer's Standard
Levers	Door Manufacturer's Standard
Exit Device Touchbar	Per Template
Wall Stops & Holders	At Head

C. Final Adjustment:

1. Provide the services of a representative to inspect material furnished and its installation and adjustment, to make final hardware adjustment, and to instruct the Owner's personnel in adjustment, care and maintenance of hardware.
2. Locksets, closers and exit devices shall be inspected by the factory representative and adjusted after installation and after the HVAC system is in operation, to insure correct installation and proper adjustment in operation. The manufacturer's representative shall prepare a written report stating compliance, and also recording locations and kinds of noncompliance. The original report shall be forwarded to the Architect with copies to the Contractor, hardware distributor, hardware installer and building owner.

D. Technical and Warranty Information

1. At the completion of the project, the technical and warranty information coalesced and kept on file by the General Contractor/Construction Manager shall be given to the Owner or Owner's Agent. In addition to both the technical and warranty information, all factory order acknowledgement numbers supplied to the General Contractor/Construction Manager during the construction period shall be given to the Owner or Owner's Agent. The warranty information and factory order acknowledgement numbers shall serve to both expedite and properly execute any warranty work that may be required on the various hardware items supplied on the project.
2. Submit to Construction Manager, two copies each of parts and service manuals and two each of any special installation or adjustment tools. Include for locksets, exit devices, door closers and any electrical products.

END OF SECTION

SECTION 088000 - GLAZING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes glazing for the following products and applications, including those specified in other Sections where glazing requirements are specified by reference to this Section:
  - 1. Doors.
  - 2. Interior borrowed lites.

1.2 PRECONSTRUCTION TESTING

- A. Preconstruction Adhesion and Compatibility Testing: Test each glazing material type, tape sealant, gasket, glazing accessory, and glass-framing member for adhesion to and compatibility with elastomeric glazing sealants.
  - 1. Testing will not be required if data are submitted based on previous testing of current sealant products and glazing materials matching those submitted.

1.3 SUBMITTALS

- A. Product Data: For each glass product and glazing material indicated.
- B. Glass Samples: For each type of glass product other than clear monolithic vision glass; 12 inches (300 mm) square.
- C. Glazing Schedule: List glass types and thicknesses for each size opening and location. Use same designations indicated on Drawings.
- D. Delegated-Design Submittal: For glass indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
- E. Preconstruction adhesion and compatibility test report.

1.4 QUALITY ASSURANCE

- A. Glazing Publications: Comply with published recommendations of glass product manufacturers, unless more stringent requirements are indicated.
- B. Safety Glazing Labeling: Where safety glazing labeling is indicated, permanently mark glazing with certification label of the SGCC or another certification agency acceptable to authorities having jurisdiction or the manufacturer. Label shall indicate manufacturer's name, type of glass, thickness, and safety glazing standard with which glass complies.
- C. Fire-Protection-Rated Glazing Labeling: Permanently mark fire-protection-rated glazing with certification label of a testing agency acceptable to authorities having jurisdiction. Label shall indicate manufacturer's name, test standard, whether glazing is for use in fire doors or other openings, whether or not glazing passes hose-stream test, whether or not glazing has a temperature rise rating of 450 deg F (250 deg C), and the fire-resistance rating in minutes.

1.5 WARRANTY

- A. Manufacturer's Special Warranty for Glass Products: Manufacturer's standard form in which coated-glass manufacturer agrees to replace glass units that deteriorate within specified warranty period.

1. Warranty Period: 10 years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 GLASS PRODUCTS, GENERAL

- A. Thickness: Where glass thickness is indicated, it is a minimum. Provide glass lites in thicknesses as needed to comply with requirements indicated.
- B. Strength: Where fully tempered glass is indicated, provide Kind FT heat-treated float glass.

### 2.2 GLASS PRODUCTS

- A. Heat-Treated Float Glass: ASTM C 1048; Type I; Quality-Q3; Class I (clear) unless otherwise indicated; of kind and condition indicated.

### 2.3 FIRE-PROTECTION-RATED GLAZING

- A. Fire-Protection-Rated Glazing, General: Listed and labeled by a testing agency acceptable to authorities having jurisdiction, for fire-protection ratings indicated, based on testing according to NFPA 257.
- B. Fire-Protection-Rated tempered glazing complying with 16 CFR 1201, Category II.

1. Basis-of-Design Product: Subject to compliance with requirements, provide SAFTI FIRST Fire Rated Glazing Solutions; SuperLite I-XL or comparable product by one of the following:
  - a. Pilkington North America.
  - b. Technical Glass Products.
  - c. Vetrotech Saint-Gobain.

### 2.4 GLAZING SEALANTS

- A. General:
  1. Compatibility: Provide glazing sealants that are compatible with one another and with other materials they will contact, including glass products, seals of insulating-glass units, and glazing channel substrates, under conditions of service and application, as demonstrated by sealant manufacturer based on testing and field experience.
  2. Suitability: Comply with sealant and glass manufacturers' written instructions for selecting glazing sealants suitable for applications indicated and for conditions existing at time of installation.
  3. VOC Content: For sealants used inside of the weatherproofing system, not more than 250 g/L when calculated according to 40 CFR 59, Subpart D.
  4. Colors of Exposed Glazing Sealants: As selected by Architect from manufacturer's full range.
- B. Glazing Sealant: Neutral-curing silicone glazing sealant complying with ASTM C 920, Type S, Grade NS, Class 25, Use NT.
  1. Available Products:
    - a. GE Silicones; Silglaze II SCS2800
    - b. Tremco; Tremsil 600
    - c. Dow Corning Corporation; 795
- C. Glazing Sealants for Fire-Rated Glazing Products: Products that are approved by testing agencies that listed and labeled fire-resistant glazing products with which they are used for applications and fire-protection ratings indicated.

## 2.5 GLAZING TAPES

- A. Back-Bedding Mastic Glazing Tapes: Preformed, butyl-based, 100 percent solids elastomeric tape; nonstaining and nonmigrating in contact with nonporous surfaces; with or without spacer rod as recommended in writing by tape and glass manufacturers for application indicated; and complying with ASTM C 1281 and AAMA 800 for products indicated below:
  - 1. AAMA 804.3 tape, where indicated.
  - 2. AAMA 806.3 tape, for glazing applications in which tape is subject to continuous pressure.
  - 3. AAMA 807.3 tape, for glazing applications in which tape is not subject to continuous pressure.
- B. Expanded Cellular Glazing Tapes: Closed-cell, PVC foam tapes; factory coated with adhesive on both surfaces; and complying with AAMA 800 for the following types:
  - 1. AAMA 810.1, Type 1, for glazing applications in which tape acts as the primary sealant.
  - 2. AAMA 810.1, Type 2, for glazing applications in which tape is used in combination with a full bead of liquid sealant.

## 2.6 MISCELLANEOUS GLAZING MATERIALS

- A. Cleaners, Primers, and Sealers: Types recommended by sealant or gasket manufacturer.
- B. Setting Blocks: Elastomeric material with a Shore, Type A durometer hardness of 85, plus or minus 5.
- C. Spacers: Elastomeric blocks or continuous extrusions of hardness required by glass manufacturer to maintain glass lites in place for installation indicated.
- D. Edge Blocks: Elastomeric material of hardness needed to limit glass lateral movement (side walking).
- E. Cylindrical Glazing Sealant Backing: ASTM C 1330, Type O (open-cell material), of size and density to control glazing sealant depth and otherwise produce optimum glazing sealant performance.
- F. Perimeter Insulation for Fire-Resistive Glazing: Product that is approved by testing agency that listed and labeled fire-resistant glazing product with which it is used for application and fire-protection rating indicated.

## 2.7 MONOLITHIC-GLASS TYPES

- A. Glass Type "A": Clear fully tempered float glass at all non-fire rated locations, unless indicated otherwise.
  - 1. Thickness: 1/4-inch.
  - 2. Provide safety glazing labeling.

## 2.8 FIRE-PROTECTION-RATED GLAZING TYPES

- A. Glass Type "B": 20-minute fire-rated glazing

## PART 3 - EXECUTION

### 3.1 GLAZING, GENERAL

- A. Comply with combined written instructions of manufacturers of glass, sealants, gaskets, and other glazing materials, unless more stringent requirements are indicated, including those in referenced glazing publications.



- B. Adjust glazing channel dimensions as required by Project conditions during installation to provide necessary bite on glass, minimum edge and face clearances, and adequate sealant thicknesses, with reasonable tolerances.
- C. Protect glass edges from damage during handling and installation. Remove damaged glass from Project site and legally dispose of off Project site. Damaged glass is glass with edge damage or other imperfections that, when installed, could weaken glass and impair performance and appearance.
- D. Apply primers to joint surfaces where required for adhesion of sealants, as determined by preconstruction testing.
- E. Install setting blocks in sill rabbets, sized and located to comply with referenced glazing publications, unless otherwise required by glass manufacturer. Set blocks in thin course of compatible sealant suitable for heel bead.
- F. Do not exceed edge pressures stipulated by glass manufacturers for installing glass lites.
- G. Provide spacers for glass lites where length plus width is larger than 50 inches (1270 mm).
- H. Provide edge blocking where indicated or needed to prevent glass lites from moving sideways in glazing channel, as recommended in writing by glass manufacturer and according to requirements in referenced glazing publications.

### 3.2 TAPE GLAZING

- A. Position tapes on fixed stops so that, when compressed by glass, their exposed edges are flush with or protrude slightly above sightline of stops.
- B. Install tapes continuously, but not necessarily in one continuous length. Do not stretch tapes to make them fit opening.
- C. Cover vertical framing joints by applying tapes to heads and sills first and then to jambs. Cover horizontal framing joints by applying tapes to jambs and then to heads and sills.
- D. Place joints in tapes at corners of opening with adjoining lengths butted together, not lapped. Seal joints in tapes with compatible sealant approved by tape manufacturer.
- E. Apply heel bead of elastomeric sealant.
- F. Center glass lites in openings on setting blocks and press firmly against tape by inserting dense compression gaskets formed and installed to lock in place against faces of removable stops. Start gasket applications at corners and work toward centers of openings.
- G. Apply cap bead of elastomeric sealant over exposed edge of tape.

### 3.3 GASKET GLAZING (DRY)

- A. Cut compression gaskets to lengths recommended by gasket manufacturer to fit openings exactly, with allowance for stretch during installation.
- B. Insert soft compression gasket between glass and frame or fixed stop so it is securely in place with joints miter cut and bonded together at corners.
- C. Installation with Drive-in Wedge Gaskets: Center glass lites in openings on setting blocks and press firmly against soft compression gasket by inserting dense compression gaskets formed and installed to lock in place against faces of removable stops. Start gasket applications at corners and work toward centers of openings. Compress gaskets to produce a weathertight seal without developing bending stresses in glass. Seal gasket joints with sealant recommended by gasket manufacturer.
- D. Installation with Pressure-Glazing Stops: Center glass lites in openings on setting blocks and press firmly against soft compression gasket. Install dense compression gaskets and pressure-glazing stops, applying pressure uniformly to compression gaskets. Compress gaskets to produce a weathertight seal without developing bending stresses in glass. Seal gasket joints with sealant recommended by gasket manufacturer.
- E. Install gaskets so they protrude past face of glazing stops.

- F. Atrium interior glass to be installed with gasketed frame so that the framing system deflects without breaking (loading) the glass before the sprinkler system operates.

#### 3.4 SEALANT GLAZING (WET)

- A. Install continuous spacers, or spacers combined with cylindrical sealant backing, between glass lites and glazing stops to maintain glass face clearances and to prevent sealant from extruding into glass channel and blocking weep systems until sealants cure. Secure spacers or spacers and backings in place and in position to control depth of installed sealant relative to edge clearance for optimum sealant performance.
- B. Force sealants into glazing channels to eliminate voids and to ensure complete wetting or bond of sealant to glass and channel surfaces.
- C. Tool exposed surfaces of sealants to provide a substantial wash away from glass.

#### 3.5 CLEANING AND PROTECTION

- A. Protect exterior glass from damage immediately after installation by attaching crossed streamers to framing held away from glass. Do not apply markers to glass surface. Remove nonpermanent labels and clean surfaces.
- B. Protect glass from contact with contaminating substances resulting from construction operations. If, despite such protection, contaminating substances do come into contact with glass, remove substances immediately as recommended in writing by glass manufacturer.
- C. Examine glass surfaces adjacent to or below exterior concrete and other masonry surfaces at frequent intervals during construction, but not less than once a month, for buildup of dirt, scum, alkaline deposits, or stains; remove as recommended in writing by glass manufacturer.
- D. Remove and replace glass that is broken, chipped, cracked, or abraded or that is damaged from natural causes, accidents, and vandalism, during construction period.

END OF SECTION 088000

SECTION 092216 - NON-STRUCTURAL METAL FRAMING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
1. Non-load-bearing steel framing systems for interior gypsum board assemblies.
  2. Suspension systems for interior gypsum ceilings and soffits.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Fire-Test-Response Characteristics: Provide materials and construction identical to those tested according to ASTM E 119.

2.2 FRAMING SYSTEMS

- A. Steel Studs and Runners: ASTM C 645.
1. Minimum Base-Metal Thickness: 0.0296 inch (20 gauge).
  2. Depth: As indicated on Drawings.
- B. Light Gage Framing for Non Structural Use: ASTM A 653.
1. Minimum Base-Metal Thickness: 0.0296 inch (20 gauge).
  2. Depth: As indicated on Drawings
- C. Lip-Type Head Joints: Where indicated, provide one of the following:
1. Single Long-Leg Runner System: ASTM C 645 top runner with 2-inch- (51-mm-) deep flanges in thickness not less than indicated for studs, installed with studs friction fit into top runner and with continuous bridging located within 12 inches (305 mm) of the top of studs to provide lateral bracing.
  2. Double-Runner System: ASTM C 645 top runners, inside runner with 2-inch- (51-mm-) deep flanges in thickness not less than indicated for studs and fastened to studs, and outer runner sized to friction fit inside runner.
  3. Deflection Track: Steel sheet top runner manufactured to prevent cracking of finishes applied to interior partition framing resulting from deflection of structure above; in thickness not less than indicated for studs and in width to accommodate depth of studs.
    - a. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
    - b. Products: Subject to compliance with requirements, provide one of the following:
      - 1) Steel Network Inc. (The): VertiTrack VTD Series.
      - 2) Superior Metal Trim; Superior Flex Track System (SFT)
- D. Firestop Tracks: Manufactured to allow partition heads to expand and contract with movement of the structure while maintaining continuity of fire-resistance-rated assembly indicated; in thickness not less than indicated for studs and in width to accommodate depth of studs.
1. Products: Subject to compliance with requirements, provide one of the following:

- a. Fire Trak Corp.; Fire Trak System.
  - b. Grace Construction Products; FlameSafe FlowTrak System.
  - c. Metal-Lite, Inc.; The System.
- E. Flat Strap and Backing Plate: Steel sheet for blocking and bracing in length and width indicated.
1. Minimum Base-Metal Thickness: 0.027 inch (0.7 mm).
- F. Cold-Rolled Channel Bridging: 0.053-inch (1.34-mm) bare-steel thickness, with minimum 1/2-inch- (13-mm-) wide flanges.
1. Depth: 1-1/2 inches (38 mm).
  2. Clip Angle: Not less than 1-1/2 by 1-1/2 inches (38 by 38 mm), 0.068-inch- (1.72-mm-) thick, galvanized steel.
- G. Hat-Shaped, Rigid Furring Channels: ASTM C 645.
1. Minimum Base-Metal Thickness: 0.033 inch (0.84 mm).
  2. Depth: 7/8 inch (22.2 mm).
- H. Cold-Rolled Furring Channels: 0.053-inch (1.34-mm) uncoated-steel thickness, with minimum 1/2-inch- (13-mm-) wide flanges.
1. Depth: As indicated on Drawings.
  2. Furring Brackets: Adjustable, corrugated-edge type of steel sheet with minimum uncoated-steel thickness of 0.033 inch (0.8 mm).
  3. Tie Wire: ASTM A 641/A 641M, Class 1 zinc coating, soft temper, 0.062-inch- (1.59-mm-) diameter wire, or double strand of 0.048-inch- (1.21-mm-) diameter wire.
- I. Z-Shaped Furring: With slotted or nonslotted web, face flange of 1-1/4 inches (31.8 mm), wall attachment flange of 7/8 inch (22 mm), minimum uncoated-metal thickness of 0.018 inch (0.45 mm), and depth required to fit insulation thickness indicated.

## 2.3 SUSPENSION SYSTEMS

- A. Tie Wire: ASTM A 641/A 641M, Class 1 zinc coating, soft temper, 0.062-inch- (1.59-mm-) diameter wire, or double strand of 0.048-inch- (1.21-mm-) diameter wire.
- B. Hanger Attachments to Concrete:
1. Anchors: Capable of sustaining a load equal to 5 times that imposed as determined by ASTM E 488.
    - a. Type: Postinstalled, expansion anchor.
  2. Powder-Actuated Fasteners: Capable of sustaining, a load equal to 10 times that imposed as determined by ASTM E 1190.
- C. Wire Hangers: ASTM A 641/A 641M, Class 1 zinc coating, soft temper, 0.16 inch (4.12 mm) in diameter.
- D. Manufactured Suspension System: At contractor's option in lieu of field fabricated metal drywall suspension, manufactured drywall suspension system may be utilized:
1. USG Drywall Suspension System
  2. Armstrong Drywall Grid System
  3. Approved equal
- E. Carrying Channels: Cold-rolled, commercial-steel sheet with a base-metal thickness of 0.053 inch (1.34 mm) and minimum 1/2-inch- (13-mm-) wide flanges.
1. Depth: 1-1/2 inches (38 mm).
- F. Furring Channels (Furring Members):
1. Cold-Rolled Channels: 0.053-inch (1.34-mm) uncoated-steel thickness, with minimum 1/2-inch- (13-mm-) wide flanges, 3/4 inch (19 mm) deep.

2. Steel Studs and Runners: ASTM C 645. Use either steel studs and runners or dimpled steel studs and runners of equivalent minimum base-metal thickness.
  - a. Minimum Base-Metal Thickness: 0.018 inch (0.45 mm).
  - b. Depth: 3-5/8 inches (92 mm).
3. Hat-Shaped, Rigid Furring Channels: ASTM C 645, 7/8 inch (22 mm) deep.
  - a. Minimum Base-Metal Thickness: 0.018 inch (0.45 mm).
4. Resilient Furring Channels: 1/2-inch- (13-mm-) deep members designed to reduce sound transmission.
  - a. Configuration: Asymmetrical or hat shaped.

#### 2.4 AUXILIARY MATERIALS

- A. Fasteners for Metal Framing: Of type, material, size, corrosion resistance, holding power, and other properties required to fasten steel members to substrates.
- B. Isolation Strip at Exterior Walls: Provide one of the following:
  1. Asphalt-Saturated Organic Felt: ASTM D 226, Type 1 (No. 15 asphalt felt), nonperforated.
  2. Foam Gasket: Adhesive-backed, closed-cell vinyl foam strips that allow fastener penetration without foam displacement, 1/8 inch (3.2 mm) thick, in width to suit steel stud size.

### PART 3 - EXECUTION

#### 3.1 INSTALLATION, GENERAL

- A. Installation Standard: ASTM C 754.
  1. Gypsum Board Assemblies: Also comply with requirements in ASTM C 840 that apply to framing installation.
- B. Install supplementary framing, and blocking to support fixtures, equipment services, heavy trim, grab bars, toilet accessories, furnishings, or similar construction.
- C. Install bracing at terminations in assemblies.
- D. Do not bridge building control and expansion joints with non-load-bearing steel framing members. Frame both sides of joints independently.

#### 3.2 INSTALLING FRAMED ASSEMBLIES

- A. Install framing system components according to spacings indicated, but not greater than spacings required by referenced installation standards for assembly types.
- B. Where studs are installed directly against exterior masonry walls or dissimilar metals at exterior walls, install isolation strip between studs and exterior wall.
- C. Install studs so flanges within framing system point in same direction.
- D. Install tracks (runners) at floors and overhead supports. Extend framing full height to structural supports or substrates above suspended ceilings, except where partitions are indicated to terminate at suspended ceilings. Continue framing around ducts penetrating partitions above ceiling.
  1. Slip-Type Head Joints: Where framing extends to overhead structural supports, install to produce joints at tops of framing systems that prevent axial loading of finished assemblies.
  2. Door Openings: Screw vertical studs at jambs to jamb anchor clips on door frames; install runner track section (for cripple studs) at head and secure to jamb studs.
    - a. Install two studs at each jamb unless otherwise indicated.

- b. Install cripple studs at head adjacent to each jamb stud, with a minimum 1/2-inch (13-mm) clearance from jamb stud to allow for installation of control joint in finished assembly.
      - c. Extend jamb studs through suspended ceilings and attach to underside of overhead structure.
    - 3. Other Framed Openings: Frame openings other than door openings the same as required for door openings unless otherwise indicated. Install framing below sills of openings to match framing required above door heads.
    - 4. Fire-Resistance-Rated Partitions: Install framing to comply with fire-resistance-rated assembly indicated and support closures and to make partitions continuous from floor to underside of solid structure.
      - a. Firestop Track: Where indicated, install to maintain continuity of fire-resistance-rated assembly indicated.
  - E. Direct Furring:
    - 1. Screw to wood framing.
    - 2. Attach to concrete or masonry with stub nails, screws designed for masonry attachment, or powder-driven fasteners spaced 24 inches (610 mm) o.c.
  - F. Installation Tolerance: Install each framing member so fastening surfaces vary not more than 1/8 inch (3 mm) from the plane formed by faces of adjacent framing.

### 3.3 INSTALLING SUSPENSION SYSTEMS

- A. Install suspension system components according to spacings indicated, but not greater than spacings required by referenced installation standards for assembly types.
- B. Isolate suspension systems from building structure where they abut or are penetrated by building structure to prevent transfer of loading imposed by structural movement.
- C. Suspend hangers from building structure as follows:
  - 1. Install hangers plumb and free from contact with insulation or other objects within ceiling plenum that are not part of supporting structural or suspension system.
    - a. Splay hangers only where required to miss obstructions and offset resulting horizontal forces by bracing, countersplaying, or other equally effective means.
  - 2. Where width of ducts and other construction within ceiling plenum produces hanger spacings that interfere with locations of hangers, install supplemental suspension members and hangers in the form of trapezes or equivalent devices.
  - 3. Do not attach hangers to steel roof deck.
  - 4. Do not attach hangers to permanent metal forms. Furnish cast-in-place hanger inserts that extend through forms.
  - 5. Do not attach hangers to rolled-in hanger tabs of composite steel floor deck.
  - 6. Do not connect or suspend steel framing from ducts, pipes, or conduit.
- D. Fire-Resistance-Rated Assemblies: Wire tie furring channels to supports.
- E. Installation Tolerances: Install suspension systems that are level to within 1/8 inch in 12 feet (3 mm in 3.6 m) measured lengthwise on each member that will receive finishes and transversely between parallel members that will receive finishes.

END OF SECTION 092216

SECTION 092900 - GYPSUM BOARD

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
  - 1. Interior gypsum board.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Fire-Resistance-Rated Assemblies: For fire-resistance-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E 119 by an independent testing agency.
- B. Low Emitting Materials: For ceiling and wall assemblies, provide materials and construction identical to those tested in assembly and complying 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."

2.2 INTERIOR GYPSUM BOARD

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
  - 1. USG Corporation.
  - 2. National Gypsum Company.
  - 3. American Gypsum.
  - 4. CertainTeed Corp.
  - 5. Georgia-Pacific Gypsum LLC.
  - 6. Lafarge North America Inc.
- B. Impact-Resistant Gypsum Board: ASTM C1396/C1396M gypsum board, tested according to ASTM C1629/C1629M.
  - 1. Core: 5/8 inch (15.9 mm), Type x.
  - 2. Surface Abrasion: ASTM C1629/C1629M, meets or exceeds Level 3 requirements.
  - 3. Indentation: ASTM C1629/C1629M, meets or exceeds Level 3 requirements.
  - 4. Soft-Body Impact: ASTM C1629/C1629M, meets or exceeds Level 3 requirements.
  - 5. Hard-Body Impact: ASTM C1629/C1629M, meets or exceeds Level 3 requirements according to test in Annex A1.
  - 6. Long Edges: Tapered.
  - 7. Mold Resistance: ASTM D3273, score of 10 as rated according to ASTM D3274.
- C. Gypsum Board, Type X: ASTM C 1396/C 1396M.
  - 1. Thickness: 5/8 inch (15.9 mm).
  - 2. Long Edges: Tapered and featured (rounded or beveled) for prefilling.

## 2.3 TRIM ACCESSORIES

- A. Interior Trim: ASTM C 1047.
  - 1. Material: Galvanized or aluminum-coated steel sheet, rolled zinc, plastic, or paper-faced galvanized steel sheet.
- B. Aluminum Trim: ASTM B 221 (ASTM B 221M), Alloy 6063-T5.

## 2.4 JOINT TREATMENT MATERIALS

- A. General: Comply with ASTM C 475/C 475M.
- B. Joint Tape:
  - 1. Interior Gypsum Board: Paper.
- C. Joint Compound for Interior Gypsum Board: For each coat use formulation that is compatible with other compounds applied on previous or for successive coats.
  - 1. Prefilling: At open joints, rounded or beveled panel edges, and damaged surface areas, use setting-type taping compound.
  - 2. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use drying-type, all-purpose compound.
  - 3. Fill Coat: For second coat, use drying-type, all-purpose compound.
  - 4. Finish Coat: For third coat, use drying-type, all-purpose compound.
  - 5. Skim Coat: For final coat of Level 5 finish, use drying-type, all-purpose compound or high-build interior coating product designed for application by airless sprayer and to be used instead of skim coat to produce Level 5 finish.

## 2.5 AUXILIARY MATERIALS

- A. General: Provide auxiliary materials that comply with referenced installation standards and manufacturer's written recommendations.
- B. Laminating Adhesive: Adhesive or joint compound recommended for directly adhering gypsum panels to continuous substrate.
  - 1. Laminating adhesive shall have a VOC content of 50 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
  - 2. Durabond 90 or equal.
- C. Steel Drill Screws: ASTM C 1002, unless otherwise indicated.

## PART 3 - EXECUTION

### 3.1 APPLYING AND FINISHING PANELS

- A. Comply with ASTM C 840.
- B. Examine panels before installation. Reject panels that are wet, moisture damaged, and mold damaged.
- C. Fasten panels to studs / framing with manufacturer approved fasteners at recommended spacing.
- D. Isolate perimeter of gypsum board applied to non-load-bearing partitions at structural abutments, except floors. Provide 1/4- to 1/2-inch- (6.4- to 12.7-mm-) wide spaces at these locations and trim edges with edge trim where edges of panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.
- E. Install trim with back flanges intended for fasteners, attach to framing with same fasteners used for panels. Otherwise, attach trim according to manufacturer's written instructions.



1. Aluminum Trim: Install in locations indicated on Drawings.
  2. Control Joints: Install control joints according to ASTM C 840 and in specific locations approved by Architect for visual effect.
- F. Prefill open joints, rounded or beveled edges, and damaged surface areas.
- G. Apply joint tape over gypsum board joints, except for trim products specifically indicated as not intended to receive tape.
- H. Gypsum Board Finish Levels: Finish panels to levels indicated below and according to ASTM C 840:
1. Level 1: Ceiling plenum areas, concealed areas, and where indicated.
  2. Level 5: At panel surfaces that will be exposed to view unless otherwise indicated.
    - a. Primer and its application to surfaces are specified in other Division 09 Sections.
- I. Protect adjacent surfaces from drywall compound and texture finishes and promptly remove from floors and other non-drywall surfaces. Repair surfaces stained, marred, or otherwise damaged during drywall application.
- J. Remove and replace panels that are wet, moisture damaged, and mold damaged.

END OF SECTION 092900

SECTION 093013 - CERAMIC TILING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
  - 1. Porcelain tile.
  - 2. Mortar
  - 3. Grout
  - 4. Primer
  - 5. Metal edge strips.
- B. Related Requirements:
  - 1. Section 079200 "Joint Sealants" for sealing of expansion, contraction, control, and isolation joints in tile surfaces.

1.3 DEFINITIONS

- A. General: Definitions in the ANSI A108 series of tile installation standards and in ANSI A137.1 apply to Work of this Section unless otherwise specified.
- B. ANSI A108 Series: ANSI A108.01, ANSI A108.02, ANSI A108.1A, ANSI A108.1B, ANSI A108.1C, ANSI A108.4, ANSI A108.5, ANSI A108.6, ANSI A108.8, ANSI A108.9, ANSI A108.10, ANSI A108.11, ANSI A108.12, ANSI A108.13, ANSI A108.14, ANSI A108.15, ANSI A108.16, and ANSI A108.17, which are contained in its "Specifications for Installation of Ceramic Tile."
- C. Module Size: Actual tile size plus joint width indicated.
- D. Face Size: Actual tile size, excluding spacer lugs.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference:
  - 1. Review requirements in ANSI A108.01 for substrates and for preparation by other trades.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For tile, grout, and accessories involving color selection.

1.6 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match and are from same production runs as products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  - 1. Tile: One Box of each type

1.7 QUALITY ASSURANCE

- A. Installer Qualifications:
  - 1. Installer has been in ceramic tiling business for a minimum of 10 years with a proven track record of minimum 5 projects of similar scope.

2. Installer has references available for above mentioned projects.

#### 1.8 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store packaged materials in original containers with seals unbroken and labels intact until time of use. Comply with requirements in ANSI A137.1 for labeling tile packages.
- B. Store tile and cementitious materials on elevated platforms, under cover, and in a dry location.
- C. Store aggregates where grading and other required characteristics can be maintained and contamination can be avoided.
- D. Store liquid materials in unopened containers and protected from freezing.

#### 1.9 FIELD CONDITIONS

- A. Environmental Limitations: Installation is within an existing space, over existing and new concrete. Contractor to verify substrate conditions prior to beginning work.

### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. Source Limitations for Tile: Obtain tile of each color or finish from single source or producer.
  1. Obtain tile of each type and color or finish from same production run and of consistent quality in appearance and physical properties for each contiguous area.
- B. Source Limitations for Setting and Grouting Materials: Obtain ingredients of a uniform quality for each mortar, adhesive, and grout component from single manufacturer and each aggregate from single source or producer.
  1. Obtain setting and grouting materials, except for unmodified Portland cement and aggregate, from single manufacturer.
  2. Obtain waterproof membrane from manufacturer of setting and grouting materials.
- C. Source Limitations for Other Products: Obtain each of the following products specified in this Section from a single manufacturer:
  1. Waterproof membrane.
  2. Metal edge strips.

#### 2.2 PRODUCTS, GENERAL

- A. ANSI Ceramic Tile Standard: Provide tile that complies with ANSI A137.1 for types, compositions, and other characteristics indicated.
  1. Provide tile complying with Standard grade requirements unless otherwise indicated.
- B. ANSI Standards for Tile Installation Materials: Provide materials complying with ANSI A108.02, ANSI standards referenced in other Part 2 articles, ANSI standards referenced by TCNA installation methods specified in tile installation schedules, and other requirements specified.

#### 2.3 TILE PRODUCTS

- A. Ceramic Tile Type CT-1: Inkjet Rectified Porcelain Tile.
  1. Manufacturer: Mediterranea
  2. Series: Modern Slate
  3. Certification: Tile certified by UL Government.
  4. Face Size: 12"x24"
  5. Offset: Install at 1/3 Offset.
  6. Thickness: 8 mm
  7. Face: Anti-Slip

8. Dynamic Coefficient of Friction: Not less than 0.75.
9. Tile Color: To be selected by Architect from Manufacturers full range.
10. Grout Color: To be selected by Architect from Manufacturers full range.
11. Locations: Floor tile where indicated on Drawings

B. Ceramic Tile Type CT-2: Inkjet Rectified Porcelain Tile Base.

1. Manufacturer: Mediterranea
2. Series: Modern Slate
3. Certification: Tile certified by UL Government.
4. Base Size: Cut from full size tiles
5. Vertical Joints: Align with floor tile joints.
6. Thickness: 8 mm
7. Face: Matte
8. Dynamic Coefficient of Friction: Not less than 0.42.
9. Tile Color: To be selected by Architect from Manufacturers full range.
10. Grout Color: To be selected by Architect from Manufacturers full range

C. Ceramic Tile Type CT-3: Porcelain Tile.

1. Manufacturer: Atlas Concorde.
2. Series: Fray.
3. Certification: Tile certified by the Porcelain Tile Certification Agency.
4. Face Size: 12"x24"
5. Offset: Install at 1/3 Offset
6. Thickness: 9 mm
7. Face: Matte
8. Dynamic Coefficient of Friction: Not less than 0.42.
9. Tile Color: To be selected by Architect from Manufacturer's full range.
10. Grout Color: To be selected by Architect from Manufacturer's full range..
11. Locations: Wall tile where indicated on Drawings.

## 2.4 SETTING MATERIALS

A. Poly modified Portland Cement Mortar: ANSI A118.1

1. Manufacturers: Subject to compliance with requirements, provide products by the following:
  - a. Laticrete Tri-lite
  - b. Architect approved equal.
2. Admixtures: Provide flexible mortar admixture if recommended by manufacturer.

## 2.5 GROUT MATERIALS

A. Pre-Mixed Epoxy Grout ANSI 118.3

1. Manufacturers: Subject to compliance with requirements, provide products by the following:
  - a. Laticrete International, Inc.; SPECTRALOCK 1 pre-mixed epoxy grout  
Provide product capable of providing the strength and performance of epoxy in a pre-mixed grout, and certified by manufacturer for intended use. Product includes Micro-Ban anti-microbial protection.

## 2.6 MISCELLANEOUS MATERIALS

- A. Trowelable Underlayments and Patching Compounds: Latex-modified, portland cement-based formulation provided or approved by manufacturer of tile-setting materials for installations indicated. Use over primer at above grade recess slab infill.
1. Laticrete NXT Level.

2. Architect approved equal.
  - B. Primers: Low VOC latex primer.
    - 1 Laticrete Prime-N-Bond.
    - 2 Architect approved equal.
  - C. Metal Edge Strips:
    1. Basis of Design Manufacturer: Subject to compliance with requirements, provide the following products by Laticrete, Schluter, or Architect approved equal:
      - a. Bullnose: Laticrete R02-A100SAT-01
      - b. Inside Corners; Laticrete R02-A100SAT-08
      - c. Outside Corners; Laticrete R02-A100SAT-04
      - d. Coves: Laticrete C02-A100SAT-01
      - e. Tile Floor transitions: Laticrete TR1-A100SAT-01
  - D. Tile Cleaner: A neutral cleaner capable of removing soil and residue without harming tile and grout surfaces, specifically approved for materials and installations indicated by tile and grout manufacturers.
- 2.7 MIXING MORTARS AND GROUT
- A. Mix mortars and grouts to comply with referenced standards and mortar and grout manufacturers' written instructions.
  - B. Add materials, water, and additives in accurate proportions.
  - C. Obtain and use type of mixing equipment, mixer speeds, mixing containers, mixing time, and other procedures to produce mortars and grouts of uniform quality with optimum performance characteristics for installations indicated.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions where tile will be installed, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
  1. Verify that substrates for setting tile are firm; dry; clean; free of coatings that are incompatible with tile-setting materials, including curing compounds and other substances that contain soap, wax, oil, or silicone; and comply with flatness tolerances required by ANSI A108.01 for installations indicated.
  2. Verify that concrete substrates for tile floors installed with bonded mortar bed comply with surface finish requirements in ANSI A108.01 for installations indicated.
    - a. Verify that surfaces that received a steel trowel finish have been mechanically scarified.
    - b. Verify that protrusions, bumps, and ridges have been removed by sanding or grinding.
  3. Verify that installation of grounds, anchors, recessed frames, electrical and mechanical units of work, and similar items located in or behind tile has been completed.
  4. Verify that joints and cracks in tile substrates are coordinated with tile joint locations; if not coordinated, adjust joint locations in consultation with Architect.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Remove existing tile or base, including mortar, adhesives and setting materials back to substrate.
- B. Existing terrazzo base coves to be ground off sufficiently to allow installation of new ceramic base or wall tile.
- C. Existing terrazzo flooring in area to receive new tile to be stripped of waxes or finishes, cleaned, and abraded as required. Provide Prime-N-Bond primer and allow to cure prior to installing tile.

### 3.3 CERAMIC TILE INSTALLATION

- A. Comply with TCNA's "Handbook for Ceramic, Glass, and Stone Tile Installation" for TCNA installation methods specified in tile installation schedules. Comply with parts of the ANSI A108 series "Specifications for Installation of Ceramic Tile" that are referenced in TCNA installation methods, specified in tile installation schedules, and apply to types of setting and grouting materials used.
  - 1. For the following installations, follow procedures in the ANSI A108 series of tile installation standards for providing 95 percent mortar coverage:
    - a. Tile floors in wet areas.
    - b. Tile floors consisting of tiles 8 by 8 inches (200 by 200 mm) or larger.
- B. Extend tile work into recesses and under or behind equipment and fixtures to form complete covering without interruptions unless otherwise indicated. Terminate work neatly at obstructions, edges, and corners without disrupting pattern or joint alignments.
- C. Accurately form intersections and returns. Perform cutting and drilling of tile without marring visible surfaces. Carefully grind cut edges of tile abutting trim, finish, or built-in items for straight aligned joints. Fit tile closely to electrical outlets, piping, fixtures, and other penetrations so plates, collars, or covers overlap tile.
- D. Where tiles differ in thickness from field tile, vary setting-bed thickness so that tiles are flush.
- E. Jointing Pattern: Lay tile in grid pattern parallel to walls. Lay out tile work and center tile fields in both directions in each space or on each wall area. Lay out tile work to minimize the use of pieces that are less than half of a tile. Provide uniform joint widths.
- F. Joint Widths: Unless otherwise indicated, install tile with the following joint widths:
  - 1. Porcelain Tile: 1/8 inch (9.5 mm).
- G. Expansion Joints: Provide expansion joints and other sealant-filled joints, including control, contraction, and isolation joints, where indicated. Form joints during installation of setting materials, mortar beds, and tile. Do not saw-cut joints after installing tiles.
  - 1. Where joints occur in concrete substrates, locate joints in tile surfaces directly above them.

### 3.4 WATERPROOFING INSTALLATION

- A. Install waterproofing to comply with ANSI A108.10 and manufacturer's written instructions to produce waterproof membrane of uniform thickness that is bonded securely to substrate.
  - 1. Coverage: Waterproofing to extend from floor to 6" up wall or to top of wall base.
- B. Allow waterproofing to cure and verify by testing that it is watertight before installing tile or setting materials over it.

### 3.5 MOVEMENT JOINT INSTALLATION

- A. Substrate joints must carry through, full width, to surface of tilework.
- B. Install expansion joints where tilework abuts restraining surfaces (such as perimeter walls, curbs, columns), changes in plane and corners.

- C. Joint width and spacing depends on application - follow TCNA "Handbook for Ceramic, Glass, and Stone Tile Installation" Detail "EJ-171 Expansion Joints" or consult sealant manufacturer for recommendation based on project parameters.
- D. Joint width:  $\geq \frac{1}{8}$ " (3mm) and  $\leq 1$ " (25mm).
- E. Joint width: depth -2:1 but joint depth must be  $\geq \frac{1}{8}$ " (3mm) and  $\leq \frac{1}{2}$ " (12mm)
- F. Layout (field defined by joints): 1:1 length: width is optimum but must be  $\leq 2:1$ . Remove all contaminants and foreign material from joint spaces/surfaces, such as dirt, dust, oil, water, frost, setting/grouting materials, sealers and old sealant/backer.
- G. Install appropriate backing material (e.g. closed cell backer rod) based on expansion joint design and as specified in section 07 92 00.
- H. Use sealant manufacturer's primer as required by their published literature.

### 3.6 ADJUSTING AND CLEANING

- A. Remove and replace tile that is damaged or that does not match adjoining tile. Provide new matching units, installed as specified and in a manner to eliminate evidence of replacement.
- B. Cleaning: On completion of placement and grouting, clean all ceramic tile surfaces so they are free of foreign matter.
  - 1. Remove grout residue from tile as soon as possible.
  - 2. Clean grout smears and haze from tile according to tile and grout manufacturer's written instructions but no sooner than 10 days after installation. Use only cleaners recommended by tile and grout manufacturers and only after determining that cleaners are safe to use by testing on samples of tile and other surfaces to be cleaned. Protect metal surfaces and plumbing fixtures from effects of cleaning. Flush surfaces with clean water before and after cleaning.

### 3.7 PROTECTION

- A. Protect installed tile work with kraft paper or other heavy covering during construction period to prevent staining, damage, and wear. If recommended by tile manufacturer, apply coat of neutral protective cleaner to completed tile walls and floors.
- B. Prohibit foot and wheel traffic from tiled floors for at least seven days after grouting is completed.
- C. Before final inspection, remove protective coverings and rinse neutral protective cleaner from tile surfaces.

END OF SECTION 093013

SECTION 09511 - ACOUSTICAL PANEL CEILINGS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
  - 1. Acoustical panels for ceilings.
  - 2. Exposed suspension system for ceilings.

1.2 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Samples: For each acoustical panel, for each exposed suspension system member, for each exposed molding and trim and for each color and texture required.
  - 1. Acoustical Panel: Set of 6-inch square samples of each type, color, pattern and texture.
  - 2. Exposed Suspension System Members, Moldings, and Trim: Set of 12-inch-long sample of each type, finish and color.
- C. Product test reports.
- D. Research/evaluation reports.
- E. Maintenance data.

1.3 QUALITY ASSURANCE

- A. Source Limitations: Obtain each type of acoustical ceiling panel and supporting suspension system through one source from a single manufacturer.
- B. Fire-Test-Response Characteristics:
  - 1. Fire-Resistance Characteristics: Where indicated, provide acoustical panel ceilings identical to those of assemblies tested for fire resistance per ASTM E 119 by UL or another testing and inspecting agency acceptable to authorities having jurisdiction.
    - a. Identify materials with appropriate markings of applicable testing and inspecting agency.
  - 2. Surface-Burning Characteristics: Acoustical panels complying with ASTM E 1264 for Class A materials, when tested per ASTM E 84.
    - a. Smoke-Developed Index: 450 or less.
- C. Mockups: Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
  - 1. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
- D. Preinstallation Conference: Conduct conference at Project site.

1.4 PROJECT CONDITIONS

- A. Environmental Limitation: Do not install acoustical panel ceilings until spaces are enclosed and weatherproof, wet work in spaces is complete and dry, work above ceilings is complete, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.
- B. Before installing acoustical panels, permit them to reach room temperature and a stabilized moisture content.



1.5 COORDINATION

- A. Coordinate layout and installation of acoustical panels and suspension system with other construction that penetrates ceilings or is supported by them, including light fixtures, HVAC equipment, fire-suppression system and partition assemblies.

PART 2 - PRODUCTS

2.1 ACOUSTICAL PANEL CEILINGS, GENERAL

- A. Acoustical Panel Standard: Comply with ASTM E 1264.
- B. Metal Suspension System Standard: Comply with ASTM C 635.
- C. Attachment Devices: Size for five times the design load indicated in ASTM C 635, Table 1, "Direct Hung," unless otherwise indicated.
- D. Wire Hangers, Braces, and Ties: Zinc-coated carbon-steel wire; ASTM A 641/A 641M, Class 1 zinc coating, soft temper.
  - 1. Size: Select wire diameter so its stress at 3 times hanger design load (ASTM C 635, Table 1, "Direct Hung") will be less than yield stress of wire, but provide not less than 0.106-inch- (2.69-mm-) diameter wire.
- E. Provide Hanger Rods or Flat Hangers from mild steel, zinc coated or protected with rust-inhibitive paint as required.
- F. Metal Edge Moldings and Trim: Type and profile indicated or, if not indicated, manufacturer's standard moldings for edges and penetrations that comply with seismic design requirements; formed from sheet metal of same material, finish, and color as that used for exposed flanges of suspension system runners.
  - 1. Provide manufacturer's standard edge moldings that fit acoustical panel edge details and suspension systems indicated and that match width and configuration of exposed runners, unless otherwise indicated.
  - 2. Where bullnose corners occur, provide preformed corners to match edge moldings.

2.2 ACOUSTICAL PANELS FOR ACOUSTICAL PANEL CEILING, SAT

- A. (SAT-1) Basis-of-Design Product: Subject to compliance with requirements, provide USG Interiors, Inc.; Product: Clean Room Clima Plus.
  - 1. Color: White.
  - 2. Face: Vinyl
  - 2. LR: Not less than .79.
  - 3. NRC: -.
  - 4. CAC: Not less than 35.
  - 5. Edge/Joint Detail: Square.
  - 6. Thickness: 5/8 inch (15 mm).
  - 7. Weight: 1.15 lb./ft.<sup>2</sup>.
  - 8. Modular Size: 24 by 24 inches (600 by 600 mm).
  - 9. Locations: Toilet Rooms.
- A. (SAT 2) Basis-of-Design Product: Subject to compliance with requirements, provide USG Interiors, Inc.; Product: Radar Fire Code Clima Plus.
  - 1. Color: White.
  - 2. Face: Perforated
  - 2. LR: Not less than .84.
  - 3. NRC: Not less than .55.
  - 4. CAC: Not less than 35.

5. Edge/Joint Detail: Square.
6. Thickness: 5/8 inch (15 mm).
7. Weight: 1.15 lb./ft.<sup>2</sup>.
8. Modular Size: 24 by 24 inches (600 by 600 mm).
9. Locations: All other spaces to receive new SAT.

### 2.3 METAL SUSPENSION SYSTEM FOR ACOUSTICAL PANEL CEILING

- A. Basis-of-Design Product: Subject to compliance with requirements, provide USG Interiors, Inc., Product DX/DXL.
- B. Wide-Face, Double-Web, Steel Suspension System: Main and cross runners roll formed from cold-rolled steel sheet, prepainted, electrolytically zinc coated, or hot-dip galvanized according to ASTM A 653/A 653M, not less than G30 (Z90) coating designation, with prefinished 15/16-inch- (24-mm-) wide metal caps on flanges.
  1. Structural Classification: Intermediate-duty system.
  2. End Condition of Cross Runners: Butt-edge type.
  3. Cap Material: Steel cold-rolled sheet.
  4. Cap Finish: Painted white.

### 2.4 ACOUSTICAL SEALANT

- A. Acoustical Sealant for Exposed and Concealed Joints: Manufacturer's standard non-sag, paintable, non-staining latex sealant complying with ASTM C 834 and the following requirements:
  1. Product is effective in reducing airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies per ASTM E 90.
  2. Product has flame-spread and smoke-developed ratings of less than 25 per ASTM E 84.
- B. Acoustical Sealant for Concealed Joints: Manufacturer's standard non-drying, non-hardening, non-skinning, non-staining, gunnable, synthetic rubber sealant recommended for sealing interior concealed joints to reduce transmission of airborne sound.
- C. Products: Subject to compliance with requirements, provide one of the following:
  1. Acoustical Sealant for Exposed and Concealed Joints:
    - a. AC-20 FTR Acoustical and Insulation Sealant; Pecora Corp.
    - b. SHEETROCK Acoustical Sealant; United States Gypsum Company.
  2. Acoustical Sealant for Concealed Joints:
    - a. BA-98; Pecora Corp.
    - b. Tremco Acoustical Sealant; Tremco, Inc.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Comply with ASTM C 636 per manufacturer's written instructions and CISCA's "Ceiling Systems Handbook."
- B. Measure each ceiling area and establish layout of acoustical panels to balance border widths at opposite edges of each ceiling. Avoid using less-than-half-width panels at borders, and comply with layout shown on reflected ceiling plans.
- C. Suspend ceiling hangers from building's structural members, plumb and free from contact with insulation or other objects within ceiling plenum. Splay hangers only where required to miss obstructions; offset resulting horizontal forces by bracing,

countersplaying, or other equally effective means. Where width of ducts and other construction within ceiling plenum produces hanger spacings that interfere with location of hangers, use trapezes or equivalent devices. When steel framing does not permit installation of hanger wires at spacing required, install carrying channels or other supplemental support for attachment of hanger wires.

1. Do not support ceilings directly from permanent metal forms or floor deck; anchor into concrete slabs.
  2. Do not attach hangers to steel deck tabs or to steel roof deck. Attach hangers to structural members.
  3. Space hangers not more than 48-inches (1200 mm) o.c. along each member supported directly from hangers, unless otherwise indicated; provide hangers not more than 8-inches (200 mm) from ends of each member.
  4. Size supplemental suspension members and hangers to support ceiling loads within performance limits established by referenced standards and publications.
- D. Secure bracing wires to ceiling suspension members and to supports with a minimum of four tight turns. Suspend bracing from building's structural members as required for hangers, without attaching to permanent metal forms, steel deck, or steel deck tabs. Fasten bracing wires into concrete with cast-in-place or postinstalled anchors.
- E. Install edge moldings and trim of type indicated at perimeter of acoustical ceiling area and where necessary to conceal edges of acoustical panels. Screw attach moldings to substrate at intervals not more than 16 inches (400 mm) o.c. and not more than 3 inches (75 mm) from ends, leveling with ceiling suspension system to a tolerance of 1/8 inch in 12 feet (3.2 mm in 3.6 m). Miter corners accurately and connect securely. Apply acoustical sealant in a continuous ribbon, concealed on back of vertical legs of mouldings, before they are installed.
- F. Install suspension system runners so they are square and securely interlocked with one another. Remove and replace dented, bent, or kinked members.
- G. Install acoustical panels with undamaged edges and fit accurately into suspension system runners and edge moldings. Scribe and cut panels at borders and penetrations to provide a neat, precise fit.

END OF SECTION 09511

SECTION 096513 - RESILIENT BASE AND ACCESSORIES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
  - 1. Resilient base.
  - 2. Resilient molding accessories.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For each exposed product and for each color and texture specified, not less than 12 inches (300 mm) long.

PART 2 - PRODUCTS

**2.1 RESILIENT WALL BASE: RWB-1 & RWB-2**

- A. Refer to "Finish Material Legend" on drawing A3.01 for product information and layout patterns.
  - 1. Color/Texture/Pattern: As selected by Architect from manufacturer's full range.
- B. Basis-of-Design Manufacturer: Subject to compliance with requirements, provide the following:
  - 1. Johnsonite
  - 2. Architect approved equal.
- C. Product Standard: ASTM F 1861, Type TP (vinyl, thermoplastic).
  - 1. Group: I Solid
  - 2. Profile: Standard Cove with Toe
- D. Height: 6 inches (RWB-1) and 4 inches (RWB-2)
- E. Minimum Thickness: 0.125 inch (3.2 mm).
- F. Lengths: Coils in manufacturer's standard length.
- G. Outside Corners: Job formed.
- H. Inside Corners: Job formed.
- I. Colors: refer to "Finish Material Schedule" on drawing A3.02.

**2.2 RESILIENT MOLDING ACCESSORIES**

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Roppe Corporation
  - 2. VPI, LLC: Floor Products Division
  - 3. Armstrong World Industries, Inc.
  - 4. Johnsonite, Inc.
  - 5. Burke Industries, Inc.
  - 6. Flexco, Inc.
  - 7. Mondo Rubber International, Inc.
  - 8. Nora Rubber Flooring
  - 9. Mannington Commercial

- B. Description: Vinyl carpet edge for glue-down applications, reducer strip for resilient flooring and transition strips.
- C. Profile and Dimensions: As required per condition. Profile must comply with ADA requirements.
- D. Locations: Provide rubber moldings at all areas where dissimilar flooring materials meet.
- E. Colors and Patterns: As selected by Architect from full range of industry colors.

## 2.3 INSTALLATION MATERIALS

- A. Trowelable Leveling and Patching Compounds: Latex-modified, portland cement based or blended hydraulic-cement-based formulation provided or approved by resilient-product manufacturer for applications indicated.
- B. Adhesives: Water-resistant type recommended by resilient-product manufacturer for resilient products and substrate conditions indicated.
  - 1. Adhesives shall have a VOC content of 50 g/L or less except that adhesive for rubber stair treads shall have a VOC content of 60 g/L or less.
- C. Stair-Tread Nose Filler: Two-part epoxy compound recommended by resilient stair-tread manufacturer to fill nosing substrates that do not conform to tread contours.
- D. Floor Polish: Provide protective, liquid floor-polish products recommended by resilient stair-tread manufacturer.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Prepare substrates according to manufacturer's written instructions to ensure adhesion of resilient products.
- B. Concrete Substrates for Resilient Stair Accessories: Prepare horizontal surfaces according to ASTM F 710.
  - 1. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
  - 2. Remove substrate coatings and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, using mechanical methods recommended by manufacturer. Do not use solvents.
  - 3. Alkalinity and Adhesion Testing: Perform tests recommended by manufacturer. Proceed with installation only after substrate alkalinity falls within range on pH scale recommended by manufacturer in writing, but not less than 5 or more than 9 pH.
  - 4. Moisture Testing: Perform tests so that each test area does not exceed 200 sq. ft. (18.6 sq. m), and perform no fewer than three tests in each installation area and with test areas evenly spaced in installation areas.
    - a. Anhydrous Calcium Chloride Test: ASTM F 1869. Proceed with installation only after substrates have maximum moisture-vapor-emission rate of 3 lb of water/1000 sq. ft. (1.36 kg of water/92.9 sq. m) in 24 hours.
    - b. Relative Humidity Test: Using in-situ probes, ASTM F 2170. Proceed with installation only after substrates have a maximum 75 percent relative humidity level measurement.
- C. Fill cracks, holes, and depressions in substrates with trowelable leveling and patching compound; remove bumps and ridges to produce a uniform and smooth substrate.
- D. Do not install resilient products until they are the same temperature as the space where they are to be installed.
- E. Immediately before installation, sweep and vacuum clean substrates to be covered by resilient products.

### 3.2 RESILIENT BASE INSTALLATION

- A. Comply with manufacturer's written instructions for installing resilient base.
- B. Apply resilient base to walls, columns, and areas where base is required as shown on the drawings.
- C. Install resilient base in lengths as long as practical without gaps at seams and with tops of adjacent pieces aligned.
- D. Tightly adhere resilient base to substrate throughout length of each piece, with base in continuous contact with horizontal and vertical substrates.
- E. Do not stretch resilient base during installation.
- F. On masonry surfaces or other similar irregular substrates, fill voids along top edge of resilient base with manufacturer's recommended adhesive filler material.
- G. Job-Formed Corners:
  - 1. Outside Corners: Use straight pieces of maximum lengths possible and form with returns not less than 3 inches in length.
    - a. Form without producing discoloration (whitening) at bends.
  - 2. Inside Corners: Use straight pieces of maximum lengths possible and form with returns not less than 3 inches in length.
    - a. Miter corners to minimize open joints.

### 3.3 RESILIENT ACCESSORY INSTALLATION

- A. Comply with manufacturer's written instructions for installing resilient accessories.
- B. Resilient Stair Accessories:
  - 1. Use stair-tread-nose filler to fill nosing substrates that do not conform to tread contours.
  - 2. Tightly adhere to substrates throughout length of each piece.
  - 3. For treads installed as separate, equal-length units, install to produce a flush joint between units.
- C. Resilient Molding Accessories: Butt to adjacent materials and tightly adhere to substrates throughout length of each piece. Install reducer strips at edges of floor covering that would otherwise be exposed.

### 3.4 CLEANING AND PROTECTION

- A. Comply with manufacturer's written instructions for cleaning and protecting resilient products.
- B. Floor Polish: Remove soil, adhesive, and blemishes from resilient stair treads before applying liquid floor polish.
  - 1. Apply two coats.
- C. Cover resilient products subject to wear and foot traffic until Substantial Completion.

END OF SECTION 096513

SECTION 096519 - RESILIENT TILE FLOORING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
  - 1. Vinyl composition floor tile.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: Full-size units of each color and pattern of floor tile required.

1.3 CLOSEOUT SUBMITTALS

- A. Maintenance data.

1.4 MAINTENANCE MATERIALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  - 1. Floor Tile: Furnish one box for every 50 boxes or fraction thereof, of each type, color, and pattern of floor tile installed.
  - 2. Locate extra material where directed by the Owner.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Fire-Test-Response Characteristics: For resilient tile flooring, as determined by testing identical products according to ASTM E 648 or NFPA 253 by a qualified testing agency.
  - 1. Critical Radiant Flux Classification: Class I, not less than 0.45 W/sq. cm.

2.2 VINYL COMPOSITION FLOOR TILE - **(VCT-1 and VCT-2)**

- A. Refer to "Finish Material Legend" on drawing A3.01 for product information and layout patterns. PATTERN TO BE DETERMINED.
- B. Basis-of-Design Manufacturer: Subject to compliance with requirements, provide the following:
  - 1. Armstrong Standard Excelon Imperial Texture VCT.
  - 2. Architect approved equal.
- C. Tile Standard: ASTM F 1066, Class 2, through-pattern tile.
- D. Wearing Surface: Smooth.
- E. Thickness: 0.125 inch (3.2 mm).
- F. Size: 12 by 12 inches (305 by 305 mm).
- G. Colors and Patterns: As selected by Architect from full range of industry colors.

## 2.3 INSTALLATION MATERIALS

- A. Trowelable Leveling and Patching Compounds: Latex-modified, portland cement based or blended hydraulic-cement-based formulation provided or approved by floor tile manufacturer for applications indicated.
- B. Adhesives: Water-resistant type recommended by floor tile and adhesive manufacturers to suit floor tile and substrate conditions indicated.
- C. Floor Polish: Provide protective, liquid floor-polish products recommended by floor tile manufacturer.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Prepare substrates according to floor tile manufacturer's written instructions to ensure adhesion of resilient products.
- B. Concrete Substrates: Prepare according to ASTM F 710.
  - 1. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
  - 2. Remove substrate coatings and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, using mechanical methods recommended by floor tile manufacturer. Do not use solvents.
  - 3. Alkalinity and Adhesion Testing: Perform tests recommended by floor tile manufacturer. Proceed with installation only after substrate alkalinity falls within range on pH scale recommended by manufacturer in writing, but not less than 5 or more than 10 pH.
  - 4. Moisture Testing: Proceed with installation only after substrates pass testing according to floor tile manufacturer's written recommendations, but not less stringent than the following:
    - a. Perform anhydrous calcium chloride test according to ASTM F 1869. Proceed with installation only after substrates have maximum moisture-vapor-emission rate of 3 lb of water/1000 sq. ft. (1.36 kg of water/92.9 sq. m) in 24 hours.
    - b. Perform relative humidity test using in situ probes according to ASTM F 2170. Proceed with installation only after substrates have a maximum 75 percent relative humidity level.
- C. Fill cracks, holes, and depressions in substrates with trowelable leveling and patching compound; remove bumps and ridges to produce a uniform and smooth substrate.
- D. Do not install floor tiles until they are the same temperature as the space where they are to be installed.
- E. Immediately before installation, sweep and vacuum clean substrates to be covered by resilient floor tile.

### 3.2 FLOOR TILE INSTALLATION

- A. Comply with manufacturer's written instructions for installing floor tile.
- B. Lay out floor tiles from center marks established with principal walls, discounting minor offsets, so tiles at opposite edges of room are of equal width. Adjust as necessary to avoid using cut widths that equal less than one-half tile at perimeter.
  - 1. Lay tiles square with room axis.
- C. Match floor tiles for color and pattern by selecting tiles from cartons in the same sequence as manufactured and packaged, if so numbered. Discard broken, cracked, chipped, or deformed tiles.
  - 1. Lay tiles with grain running in one direction.



- D. Scribe, cut, and fit floor tiles to butt neatly and tightly to vertical surfaces and permanent fixtures including built-in furniture, cabinets, pipes, outlets, and door frames.
- E. Extend floor tiles into toe spaces, door reveals, closets, and similar openings. Extend floor tiles to center of door openings.
- F. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on floor tiles as marked on substrates. Use chalk or other nonpermanent marking device.
- G. Install floor tiles on covers for telephone and electrical ducts, building expansion-joint covers, and similar items in finished floor areas. Maintain overall continuity of color and pattern between pieces of tile installed on covers and adjoining tiles. Tightly adhere tile edges to substrates that abut covers and to cover perimeters.
- H. Adhere floor tiles to flooring substrates using a full spread of adhesive applied to substrate to produce a completed installation without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, and other surface imperfections.

### 3.3 CLEANING AND PROTECTION

- A. Comply with manufacturer's written instructions for cleaning and protecting floor tile.
- B. Floor Polish: Remove soil, adhesive, and blemishes from floor tile surfaces and strip floors as required before applying liquid floor polish.
  - 1. Apply one coat.
- C. Cover floor tile until Substantial Completion.

END OF SECTION 096519

SECTION 096813 - TILE CARPETING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes
  1. Modular, tufted Carpet Tile.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Samples: For each exposed product and for each color and texture specified.

1.3 INFORMATIONAL SUBMITTALS

- A. Sample warranty.

1.4 CLOSEOUT SUBMITTALS

- A. Maintenance data.

1.5 ATTIC STOCK

- A. Provide 2% attic stock. Locate stock where directed by the Owner.

1.6 QUALITY ASSURANCE

- A. Fire-Test-Response Ratings: Where indicated, provide carpet tile identical to those of assemblies tested for fire response according to NFPA 253 by a qualified testing agency.
- B. Installer Qualifications: An experienced installer who is certified and approved by the carpet manufacturer.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Comply with CRI 104.

1.8 FIELD CONDITIONS

- A. Comply with CRI 104 for temperature, humidity, and ventilation limitations.

1.9 WARRANTY

- A. Special Warranty for Carpet Tiles: Manufacturer agrees to repair or replace components of carpet tile installation that fail in materials or workmanship within specified warranty period.
  1. Warranty does not include deterioration or failure of carpet tile due to unusual traffic, failure of substrate, vandalism, or abuse.
  2. Failures include, but are not limited to, more than 10 percent edge raveling, snags, runs, dimensional stability, loss of tuft bind strength, loss of face fiber, and delamination.
  3. Warranty Period: 10 years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 CARPET TILE: (CPT-1 & CPT-2).

- A. Refer to "Finish Material Legend" on drawing A3.01 for product information and layout patterns.
  - 1. Color/Texture/Pattern: As selected by Architect from manufacturer's full range.

### 2.2 INSTALLATION ACCESSORIES

- A. Trowelable Leveling and Patching Compounds: Latex-modified, hydraulic-cement-based formulation provided or recommended by carpet tile manufacturer.
- B. Adhesives: Water-resistant, mildew-resistant, nonstaining, pressure-sensitive type to suit products and subfloor conditions indicated, that complies with flammability requirements for installed carpet tile and is recommended by carpet tile manufacturer for releasable installation.
  - 1. Adhesives shall have a VOC content of 50 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
- C. Transition Strips: Refer to Section 096513 Resilient Base and Accessories for resilient transition strips.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Concrete Slabs:
  - 1. Moisture Testing: Perform tests so that each test area does not exceed 200 sq. ft. (18.6 sq. m) and perform no fewer than three tests in each installation area and with test areas evenly spaced in installation areas.
    - a. Anhydrous Calcium Chloride Test: ASTM F 1869. Proceed with installation only after substrates have maximum moisture-vapor-emission rate of 3 lb of water/1000 sq. ft. (1.36 kg of water/92.9 sq. m) in 24 hours.
    - b. Relative Humidity Test: Using in situ probes, ASTM F 2170. Proceed with installation only after substrates have a maximum 75 percent relative humidity level measurement.
    - c. Perform additional moisture tests recommended in writing by adhesive and carpet tile manufacturers. Proceed with installation only after substrates pass testing.

### 3.2 PREPARATION

- A. General: Comply with CRI's "CRI Carpet Installation Standards" and with carpet tile manufacturer's written installation instructions for preparing substrates indicated to receive carpet tile.
- B. Use trowelable leveling and patching compounds, according to manufacturer's written instructions, to fill cracks, holes, depressions, and protrusions in substrates. Fill or level cracks, holes and depressions 1/8 inch (3 mm) wide or wider, and protrusions more than 1/32 inch (0.8 mm) unless more stringent requirements are required by manufacturer's written instructions.
- C. Concrete Substrates: Remove coatings, including curing compounds, and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, without using solvents. Use mechanical methods recommended in writing by adhesive and carpet tile manufacturers.

- D. Broom and vacuum clean substrates to be covered immediately before installing carpet tile.

### 3.3 INSTALLATION

- A. General: Comply with CRI's "CRI Carpet Installation Standard," Section 18, "Modular Carpet" and with carpet tile manufacturer's written installation instructions.
- B. Installation Method: As recommended in writing by carpet tile manufacturer.
- C. Maintain dye-lot integrity. Do not mix dye lots in same area.
- D. Maintain pile-direction patterns indicated on Drawings.
- E. Cut and fit carpet tile to butt tightly to vertical surfaces, permanent fixtures, and built-in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosings. Bind or seal cut edges as recommended by carpet tile manufacturer.
- F. Extend carpet tile into toe spaces, door reveals, closets, open-bottomed obstructions, removable flanges, alcoves, and similar openings.
- G. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on carpet tile as marked on subfloor. Use nonpermanent, nonstaining marking device.
- H. Install pattern parallel to walls and borders.
- I. Protect carpet tile against damage from construction operations and placement of equipment and fixtures during the remainder of construction period. Use protection methods indicated or recommended in writing by carpet tile manufacturer.

END OF SECTION 096813

SECTION 099123 - INTERIOR PAINTING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes surface preparation and the application of paint systems on the following interior substrates:
  - 1. Concrete masonry units (CMU).
  - 2. Glazed Masonry
  - 3. Steel.
  - 4. Gypsum board or plaster.
- B. Refer to Division 9 Section "High Performance Coatings" for painting of embedded steel lintels.

1.2 DEFINITIONS

- A. Gloss Level 1: Not more than 5 units at 60 degrees and 10 units at 85 degrees, according to ASTM D 523.
- B. Gloss Level 2: Not more than 10 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.
- C. Gloss Level 3: 10 to 25 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.
- D. Gloss Level 4: 20 to 35 units at 60 degrees and not less than 35 units at 85 degrees, according to ASTM D 523.
- E. Gloss Level 5: 35 to 70 units at 60 degrees, according to ASTM D 523.
- F. Gloss Level 6: 70 to 85 units at 60 degrees, according to ASTM D 523.
- G. Gloss Level 7: More than 85 units at 60 degrees, according to ASTM D 523.

1.3 SUBMITTALS

- A. Product Data: For each type of product. Include preparation requirements and application instructions.
- B. Samples: Paint drawdown cards for each color and type of topcoat.

PART 2 - PRODUCTS

2.1 PAINT, GENERAL

- A. Manufacturers: Subject to compliance with requirements, provide products from one of the following manufacturers:
  - 1. Sherwin Williams
  - 2. Benjamin Moore
  - 3. Pratt & Lambert
  - 4. PPG
  - 5. Glidden
  - 6. Valspar

- B. MPI Standards: Provide products that comply with MPI standards indicated and that are listed in its "MPI Approved Products List."
- C. Material Compatibility:
  - 1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
  - 2. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.
- D. VOC Content: Products shall comply with VOC limits of authorities having jurisdiction.
  - 1. Flat Paints and Coatings: 50 g/L.
  - 2. Nonflat Paints and Coatings: 150 g/L.
  - 3. Dry-Fog Coatings: 400 g/L.
  - 4. Primers, Sealers, and Undercoaters: 200 g/L.
  - 5. Anticorrosive and Antirust Paints Applied to Ferrous Metals: 250 g/L.
  - 6. Zinc-Rich Industrial Maintenance Primers: 340 g/L.
  - 7. Pretreatment Wash Primers: 420 g/L.
  - 8. Floor Coatings: 100 g/L.
  - 9. Shellacs, Clear: 730 g/L.
  - 10. Shellacs, Pigmented: 550 g/L.

## 2.2 PRIMERS/SEALERS

- A. Primer Sealer, Latex, Interior: MPI #50.
  - 1. Basis of Design: Sherwin Williams Pro Mar 200, B28WO2600 Interior Latex Primer
- B. Primer, Block Filler, Latex, interior, MPI #4
  - 1. Basis of Design: Sherwin Williams Pro Industrial Heavy Duty Block Filler
- C. Primer, Bonding, Urethane Modified Acrylic, MPI #17
  - 1. Basis of Design: Sherwin Williams Extreme Bond Primer, B51WO1150

## 2.3 METAL PRIMERS

- A. Primer, Alkyd, Anti-Corrosive, for Metal: MPI #79.
  - 1. Basis of Design: Sherwin Williams Kem Bond HS B50WZ004

## 2.4 OIL-BASED PAINTS

- A. Enamel, Alkyd: MPI #81
  - 1. Basis of Design: Sherwin Williams Direct to Metal B55W00101

## 2.5 WATER-BASED PAINTS

- A. Latex, Interior: MPI #43.
  - 1. Basis of Design: Sherwin Williams Pro Mar 200, B31-2600 Interior Latex Paint

## 2.6 EPOXY PAINTS

- A. Epoxy, Water Based, Catalyzed: MPI #115.
  - 1. Basis of Design: Sherwin Williams Pro Industrial, B73W311 Catalyzed Epoxy Paint

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
  - 1. Concrete: 12 percent.
  - 2. Masonry (Clay and CMU): 12 percent.
  - 3. Wood: 15 percent.
  - 4. Gypsum Board: 12 percent.
  - 5. Plaster: 12 percent.
- C. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
- D. Proceed with coating application only after unsatisfactory conditions have been corrected.
  - 1. Application of coating indicates acceptance of surfaces and conditions.

#### 3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Manual" applicable to substrates indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
  - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
- C. Light abrade glazed masonry or other glossy surfaces as recommended by the paint manufacturer prior to priming.
- D. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
  - 1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.

#### 3.3 APPLICATION

- A. Apply primers and paints according to manufacturer's written instructions and to recommendations in "MPI Manual."
- B. Adhesion Test: Use principles of ASTM D3359 after minimum 7 day cure time of primer to ensure 90% of coating continues to adhere, contact coatings manufacturer for assistance as needed.
- C. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

### 3.4 CLEANING AND PROTECTION

- A. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- B. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

### 3.5 INTERIOR PAINTING SCHEDULE

- A. Steel Substrates:
  - 1. Quick-Drying Enamel System:
    - a. Prime Coat: Primer, alkyd, anti-corrosive, for metal, MPI #79
    - b. Intermediate Coat: Alkyd, matching topcoat.
    - c. Topcoat: Alkyd, quick dry, semi-gloss (Gloss Level 5), MPI #81.
- B. Concrete Masonry Substrates:
  - 1. Latex System:
    - a. Prime Coat: Block Filler (at new CMU)
    - b. Intermediate Coat: Latex, interior, matching topcoat.
    - c. Topcoat: Latex, interior, semi-gloss (Gloss Level 5), MPI #43.
- C. Glazed Masonry Substrates:
  - 1. Epoxy System:
    - a. Prime Coat: Bonding Primer MPI #17
    - b. Intermediate Coat: Epoxy, matching topcoat.
    - c. Topcoat: Epoxy, Water Based, Catalyzed, (Gloss Level 5), MPI #115.
- D. Gypsum Board or Plaster Substrates:
  - 1. Latex System:
    - a. Prime Coat: Primer sealer, latex, interior, MPI #50.
    - b. Intermediate Coat: Latex, interior, matching topcoat.
    - c. Topcoat: Latex, interior, (Gloss Level 5), MPI #43.

### 3.6 PAINT COLOR SCHEDULE

- A. Refer to Drawings for paint colors and locations.

END OF SECTION 099123



SECTION 102113.19 - SOLID POLYMER TOILET COMPARTMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
  - 1. Solid-polymer toilet compartments configured as toilet enclosures and urinal screens.

1.2 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.
- C. Samples: Provide samples of manufacturer's standard range of colors for selection by Architect.
- D. Maintenance data.

1.3 QUALITY ASSURANCE

- A. Surface-Burning Characteristics: As determined by testing identical products according to ASTM E 84, or another standard acceptable to authorities having jurisdiction, by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
  - 1. Flame-Spread Index: 25 or less.
  - 2. Smoke-Developed Index: 450 or less.
- B. Regulatory Requirements: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA) and Architectural Barriers Act (ABA) Accessibility Guidelines for Buildings and Facilities" and ICC/ANSI A117.1 for toilet compartments designated as accessible.

1.4 WARRANTY

- A. Manufacturer's Warranty: Manufacturer's standard form in which manufacturer agrees to replace partitions that do not comply with requirements or that fail within 15 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 SOLID-POLYMER UNITS

- A. Manufacturers: Subject to compliance with requirements, provide solid polymer toilet compartments by ASI Global Partitions, or comparable products by one of the following:
  - 1. Scranton Products
  - 2. Accurate Partitions Corporation.
  - 3. Ampco, Inc.
  - 4. Bradley Corporation; Mills Partitions.
  - 5. General Partitions Mfg. Corp.
  - 6. Hadrian Manufacturing Inc.
  - 7. Metpar Corp.
  - 8. Weis-Robart Partitions, Inc.
- B. Toilet-Enclosure Style: Overhead braced.
- C. Urinal-Screen Style: Wall hung.

- D. Door, Panel, and Pilaster Construction: Solid, high-density polyethylene (HDPE) panel material, not less than 1 inch (25 mm) thick, seamless, with eased edges, and with homogenous color and pattern throughout thickness of material.
  - 1. Integral Hinges: Configure doors and pilasters to receive integral hinges.
  - 2. Heat-Sink Strip: Manufacturer's standard continuous, extruded-aluminum or stainless-steel strip fastened to exposed bottom edges of solid-polymer components to prevent burning.
  - 3. Polymer Panel Finish: One color and pattern in each room.
    - a. Color and Pattern: To be selected by Architect from Manufacturer's full range of colors and textures.
- E. Pilaster Shoes and Sleeves (Caps): Manufacturer's standard design; ASTM A167, Type 302/304 stainless steel.
- F. Brackets (Fittings):
  - 1. Full-Height (Continuous) Angle: Manufacturer's extruded aluminum or stainless steel.

## 2.2 ACCESSORIES

- A. Hardware and Accessories: Manufacturer's standard design, heavy-duty operating hardware and accessories.
  - 1. Material: Chrome-plated zamac, Stainless steel or Chrome-plated brass.
  - 2. Hinges: Manufacturer's integral hinge for solid-polymer doors.
  - 3. Latch and Keeper: Manufacturer's standard surface-mounted latch unit designed for emergency access and with combination rubber-faced door strike and keeper. Provide units that comply with regulatory requirements for accessibility at compartments designated as accessible.
  - 4. Coat Hook: Manufacturer's standard combination hook and rubber-tipped bumper, sized to prevent in-swinging door from hitting compartment-mounted accessories.
  - 5. Door Bumper: Manufacturer's standard rubber-tipped bumper at out-swinging doors.
  - 6. Door Pull: Manufacturer's standard unit at out-swinging doors that complies with regulatory requirements for accessibility. Provide units on both sides of doors at compartments designated as accessible.
- B. Overhead Bracing: Manufacturer's standard continuous, extruded-aluminum head rail with anti-grip profile and in manufacturer's standard finish.
- C. Anchorages and Fasteners: Manufacturer's standard exposed fasteners of stainless steel or chrome-plated brass, finished to match the items they are securing, with theft-resistant-type heads. Provide sex-type bolts for through-bolt applications. For concealed anchors, use stainless steel, hot-dip galvanized steel, or other rust-resistant, protective-coated steel.

## 2.3 FABRICATION

- A. Overhead-Braced Units: Provide manufacturer's standard corrosion-resistant supports, leveling mechanism, and anchors at pilasters to suit floor conditions. Provide shoes at pilasters to conceal supports and leveling mechanism.
- B. Urinal Screens: Furnish panel and pilaster in sizes indicated, of same construction and finish as partition system panels.
- C. Panels: Dividing panels shall be 55-inches high, unless noted otherwise and mounted at 14-inches above finish floor.
- D. Door Size and Swings: Unless otherwise indicated, provide 24-inch- (610-mm-) wide, in-swinging doors for standard toilet compartments and 36-inch- (914-mm-) wide, out-swinging doors with a minimum 32-inch- (813-mm-) wide, clear opening for compartments designated as accessible.

### PART 3 - EXECUTION

#### 3.1 INSTALLATION

- A. General: Comply with manufacturer's written installation instructions. Install units rigid, straight, level, and plumb. Secure units in position with manufacturer's recommended anchoring devices.
- B. Clearances: Maximum 1/2 inch (13 mm) between pilasters and panels; 1 inch (25 mm) between panels and walls.
- C. Hardware: Install per manufacturer's standards. Comply with ADA and barrier free requirements.
- D. Continuous Brackets: Secure panels in position with manufacturer's recommended anchoring devices.
  - 1. Locate continuous wall brackets so holes for wall anchors occur in masonry or tile joints.
  - 2. Secure panels to pilasters with continuous brackets located to align with brackets at wall.

#### 3.2 ADJUSTING AND CLEANING

- A. Hardware Adjustment: Adjust and lubricate hardware according to hardware manufacturer's written instructions for proper operation. Set hinges on in-swinging doors to hold doors open approximately 30 degrees from closed position when unlatched. Set hinges on out-swinging doors to return doors to approximately 10 degrees from closed position when unlatched.
- B. Clean exposed surface of partition systems using materials and methods recommended by manufacturer. Provide protection to prevent damage during construction period.

END OF SECTION 102113

SECTION 102800 - TOILET ACCESSORIES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
  - 1. Washroom accessories.
  - 2. Installation of Owner provided accessories.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.

1.3 INFORMATIONAL SUBMITTALS

- A. Warranty: Sample of special warranty.

1.4 CLOSEOUT SUBMITTALS

- A. Maintenance data.

PART 2 - PRODUCTS

2.1 WASHROOM ACCESSORIES

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. A & J Washroom Accessories, Inc.
  - 2. American Specialties, Inc.
  - 3. Bobrick Washroom Equipment, Inc.
  - 4. Bradley Corporation.
  - 5. GAMCO Specialty Accessories; a division of Bobrick Washroom Equipment, Inc.
  - 6. Tubular Specialties Manufacturing, Inc.
- B. Toilet Tissue Dispenser: Install Owner provided equipment.
- C. Paper Towel (Folded) Dispenser: Install Owner provided equipment.
- D. Liquid-Soap Dispenser: Install Owner provided equipment.
- E. Sanitary Napkin Disposal Units
  - 1. Basis-of-Design Product: Bradley 4B2-11 Elvari
  - 2. Mounting: Surface mounted
  - 3. Material: Stainless Steel, Satin finish
  - 4. Features: Used / empty indicator
  - 5. Mounting Brackets: Manufacturer's standard concealed brackets.
  - 6. Locations: 1 per toilet compartment for female bathrooms.
- F. Mirror:
  - 1. Basis-of-Design Product: Bradley 781.
  - 2. Frame:  $\frac{3}{4}$ " x  $\frac{3}{4}$ " bright finished stainless steel with 90 degree mitred corners.
  - 3. Back: Galvanized steel
  - 4. Mirror:  $\frac{1}{4}$ " float glass with manufacturer's standard reflective backing with a protective finish, and shock absorbing material installed between the frame, metal back panel and the glass.
  - 5. Mounting Brackets: Manufacturer's standard concealed brackets.
  - 6. Dimensions: as indicated on Drawings.
- G. Grab Bar:

1. Basis-of-Design Product: Bradley 812, Straight Grab Bar.
2. Mounting: Flanges with concealed fasteners.
3. Material: Stainless steel, 0.05 inch (1.3 mm) thick.
  - a. Finish: Safety grip finish.
4. Outside Diameter: 1-1/2 inches (38 mm).
5. Configuration and Length: Wheelchair Compartments: 36" rear wall horizontal, 42" side wall horizontal, 18" side wall vertical each compartment. Ambulatory Compartments: (2) 42" side wall horizontal each compartment.

### PART 3 - EXECUTION

#### 3.1 INSTALLATION

- A. Install accessories according to manufacturers' written instructions, using fasteners appropriate to substrate indicated and recommended by unit manufacturer. Install units level, plumb, and firmly anchored in locations and at heights indicated.
- B. Install Owner provided accessories as noted. Install units level, plumb, and firmly anchored in locations and at heights indicated.
- C. Grab Bars: Install to withstand a downward load of at least 250 lbf (1112 N), when tested according to ASTM F 446.

END OF SECTION 102800

SECTION 105113 - METAL LOCKERS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes:
  - 1. Metal Lockers

1.2 SUBMITTALS

- A. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of locker and bench.
- B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other Work.
  - 1. Show locker fillers, trim, base, sloping tops, and accessories. Include locker-numbering sequence.
  - 2. Indicate clear opening width and height for metal instrument lockers.
- C. Samples for Initial Selection: Manufacturer's color charts showing the full range of colors available for units with factory-applied color finishes.
- D. Samples for Verification: Manufacturer's painted finish samples on the same metal substrate to be used for the Work.
- E. Maintenance Data: For adjusting, repairing, and replacing locker doors and latching mechanisms to include in maintenance manuals specified in Division 1.

1.3 QUALITY ASSURANCE

- A. Source Limitations: Obtain locker units and accessories through one source from a single manufacturer.
- B. Accessibility Requirements: Where accessible lockers are required, comply with the following:
  - 1. Single Tier: Provide 1 shelf located no higher than 48 inches (1219 mm) above the floor and 1 shelf located at bottom of locker no lower than 15 inches (381 mm) above the floor for forward or side reach.
  - 2. Double Tier: Only bottom locker to be designated accessible. Provide one shelf located no lower than 15 inches (381mm) above the floor for foreward or side reach.
  - 3. Provide hardware that does not require tight grasping, pinching, or twisting of the wrist, and that operates with a force of not more than 5 lbf (22.2 N), and located not more than 48" (1219mm) above finished floor.
  - 4. Provide accessibility label.
  - 5. Provide accessible locker benches in addition to standard benches where required.
  - 6. Refer to Drawings for locations of accessible lockers and benches.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Do not deliver lockers until spaces to receive them are clean, dry, and ready for locker installation.
- B. Protect lockers from damage during delivery, handling, storage, and installation.

1.5 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of metal lockers that fail in materials or workmanship, excluding finish, within specified warranty period.

1. Warranty Period: Two years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. Accessibility Requirements: For lockers indicated to be accessible, comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines, ICC A117.1 and the Michigan Building Code.
  1. Provide 5% accessible lockers. Indicate on Shop Drawings

### 2.2 METAL LOCKERS

- A. Basis of Design Manufacturer: Subject to compliance with specified requirements, provide metal lockers by Penco Products, Inc., or equivalent products by one of the following:
  1. Manufacturers:
    - a. ASI Storage Solutions; ASI Group
    - b. General Storage Systems Ltd.
    - c. Hadrian Manufacturing Inc.
    - d. Lyon Workspace Products, LLC
    - e. Republic Storage Systems, LLC

### 2.3 MATERIALS

- A. Cold-Rolled Steel Sheet: ASTM A 366/ASTM A1008, matte finish, suitable for exposed applications, and stretcher leveled or roller leveled to stretcher-leveled flatness.
- B. Galvanized Steel Sheet: ASTM A 653/ASTM A879, commercial quality, G60 (90G90G) coating designation; mill phosphatized; suitable for exposed applications, and stretcher leveled or roller leveled to stretcher-leveled flatness.
- C. Fasteners: Zinc- or nickel-plated steel, slotless-type exposed bolt heads, and self-locking nuts or lock washers for nuts on moving parts.

### 2.4 LOCKER TYPE 'A' - KNOCKED-DOWN CORRIDOR LOCKERS

- A. Basis of Design Product: Penco Vanguard.
  1. Single Tier
  2. 12"w x 12" d.
  3. 72"h.
  4. Sloping Tops and fillers.
- B. Body: Form backs, tops, bottoms, sides, and intermediate partitions from steel sheet; flanged for double thickness at back vertical corners. Comply with the following:
  1. Back-Material Sheet Thickness: 0.0239 inch (24 gage).
  2. Side-Material Sheet Thickness: 0.0239 inch (24 gage).
  3. Exposed Ends: Form exposed ends of nonrecessed lockers from minimum 0.0598 inch (16 gage) thick steel sheet.
  4. Bottoms: 0.0598 inch (16 gage).
  5. Legless option: for installation on locker base by others.
- C. Frames: Form channel frames from minimum 0.0598-inch (16 gage) thick steel sheet; lapped and welded at corners. Form continuous integral door strike on vertical frame members. Provide resilient bumpers to cushion door closing.
  1. Latch Hooks: Form from minimum 0.1046-inch (12 gage) thick steel; welded or riveted to

- door frames.
- 2. Cross Frames: Form intermediate channel cross frames between tiers from minimum 0.0598-inch-thick steel sheet. Weld to vertical frame members.
- D. Doors: One-piece steel sheet, formed into channel shape at vertical edges and flanged at right angles at top and bottom edges. Fabricate to prevent springing when opening or closing, and to swing 180 degrees. Comply with the following:
  - 1. Sheet Thickness: 0.0598 inch (16 gage) minimum.
  - 2. Reinforcement: Brace or reinforce inner face of doors more than 15 inches wide.
  - 3. Ventilation: Solid doors to match existing.
- E. Shelves: Provide top shelf fabricated from minimum 0.0239-inch (24 gage) thick, formed steel sheet; flanged on all edges.
- F. Hinges: Steel, full loop, five or seven knuckle; tight pin; minimum 2 inches high. Weld to inside of door frame and attach to door with at least two factory-installed fasteners that are completely concealed and tamper resistant when door is closed.
  - 1. Provide three hinges for each door.
- G. Recessed Handle and Latch: Manufacturer's standard housing, formed from 0.0359-inch (20 gage) thick nickel-plated steel or stainless steel, with integral door pull, recessed for latch lifter and locking devices; nonprotruding latch lifter; and automatic, prelocking, pry-resistant latch, as follows:
  - 1. Provide three-point latching for each door.
    - a. Provide strike and eye for padlock.
    - b. Provide number plate on recess housing to match existing.
- H. Interior Equipment: Furnish each locker with the following items, unless otherwise indicated:
  - 1. Hooks: Manufacturer's standard zinc-plated, ball-pointed steel. Provide one double-prong ceiling hook, and not fewer than two single-prong wall hooks. Attache hooks with at least two fasteners.

## 2.5 **LOCKER TYPE 'B'** - RECESSED CORRIDOR LOCKERS

- A. Basis of Design Product: Penco Vanguard.
  - 1. Similar to Locker Type 'A' except recessed
  - 2. Single Tier
  - 3. 12"w x 12" d.
  - 4. 72"h.
  - 5. Recessed Trim and Fillers.

## 2.6 FABRICATION - GENERAL

- A. Existing Lockers: New locker units are to replace existing locker units, which shall be field verified.
- B. Unit Principle: Fabricate each locker with an individual door and frame, individual top, bottom, back, and shelves, and common intermediate uprights separating compartments.
- C. Fabricate lockers square, rigid, and without warp, with metal faces flat and free of dents or distortion. Make exposed metal edges free of sharp edges and burrs, and safe to touch.
  - 1. Form locker-body panels, doors, shelves and accessories from one-piece steel sheet, unless otherwise indicated.
- D. Continuously Sloping Tops: Manufacturer's standard sloping tops, fabricated from minimum 0.0478-inch (18 gage) thick steel sheet, for installation over lockers with separate flat tops. Fabricate tops in lengths as long as practicable, without visible fasteners at splice locations,



finished to match lockers. Provide fasteners, filler plates, supports, and closures, as follows:

1. Closures: Vertical-end type.
  2. Sloped top corner fillers, mitered.
- E. Recess Trim: Manufacturer's standard; fabricated from minimum 0.0478-inch (18 gage) thick steel sheet, minimum 3-inch face width, and finished to match lockers. Fabricate trim in lengths as long as practicable.
- F. Filler Panels: Manufacturer's standard; fabricated from minimum 0.0359-inch (20 gage) thick steel sheet in an unequal leg angle shape, and finished to match lockers. Provide slip joint filler angle formed to receive filler panel. Provide filler panels at all gaps or openings between lockers and adjacent locker banks or walls.
- G. Number Plates: Match existing type, base metal and finish. Located in recessed latch housing.
1. Numbers are to match existing scheme.

#### 2.10 FINISHES, GENERAL

- A. Finish all steel surfaces and accessories, except prefinished stainless-steel and chrome-plated surfaces.
- B. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- D. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

#### 2.11 STEEL SHEET FINISHES

- A. Surface Preparation: Clean surfaces of dirt, oil, grease, mill scale, rust, and other contaminants that could impair paint bond. Use manufacturer's standard methods.
- B. Enamel Finish: Immediately after cleaning and pretreating, apply manufacturer's standard powder coat or baked-enamel finish. Comply with paint manufacturer's written instructions for applying and baking to achieve a minimum dry film thickness of 1.4 mils on doors and frames, and 1.1 mils elsewhere.
1. Color: match existing warm gray.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine existing locker bases or recesses for suitable conditions where metal lockers are to be installed.
1. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.2 INSTALLATION

- A. Install metal lockers and accessories level, plumb, rigid, and flush according to manufacturer's written instructions.

- B. Assemble knocked-down lockers with standard fasteners, with no exposed fasteners on door faces and face frames.
- C. Connect groups of all-welded lockers together with standard fasteners, with no exposed fasteners on face frames.
- D. Anchor lockers to floors and walls at intervals recommended by manufacturer, but not more than 36 inches o.c. Install anchors through backup reinforcing plates where necessary to avoid metal distortion, using concealed fasteners.
- E. Fit exposed connections of trim, fillers, and closures accurately together to form tight, hairline joints, with concealed fasteners and splice plates.
  - 1. Attach recess trim to recessed lockers with concealed clips.
  - 2. Attach sloping top units to lockers, with closures at exposed ends.
- F. Attach finished end panels with fasteners only at perimeter to conceal exposed ends of non-recessed lockers.

### 3.3ADJUSTING, CLEANING, AND PROTECTION

- A. Adjust doors and latches to operate easily without binding. Verify that integral locking devices operate properly.
- B. Clean interior and exposed exterior surfaces and polish stainless-steel and nonferrous-metal surfaces.
- C. Protect lockers from damage, abuse, dust, dirt, stain, or paint. Do not permit locker use during construction.
- D. Touch up marred finishes, or replace locker units that cannot be restored to factory-finished appearance. Use only materials and procedures recommended or furnished by locker manufacturer.

END OF SECTION 105113

SECTION 107313 - AWNINGS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:

- 1. Fixed awnings.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.

- 1. Include styles, material descriptions, construction details, fabrication details, dimensions of individual components and profiles, hardware, fittings, mounting accessories, features, and finishes for awnings.
- 2. Include rated capacities, operating characteristics, electrical characteristics, and furnished specialties and accessories.

- B. Shop Drawings:

- 1. Include plans, elevations, sections, mounting heights, and attachment details.
- 2. Detail fabrication and assembly of awnings.
- 3. Include diagrams for power, signal, and control wiring.
- 4. Show locations for blocking, reinforcement, and supplementary structural support.
- 5. Graphics: Show text message, font, character sizes, and other graphic forms; character, word, and line spacing; margin widths; position of copy; and other information related to graphic design.

- C. Samples: For each exposed product and for each color and texture specified.

- D. Samples for Initial Selection: For each type of exposed finish.

- 1. Include Samples of graphics on fabric and accessories involving color or finish selection.

- E. Samples for Verification: For the following:

- 1. Awning Fabric: 12-inch square section of fabric from dye lot to be used for the Work, with specified treatments applied. Mark face of fabric.

2. Graphics: Not less than 12-inch square section showing graphics application method.
3. Seam, Edge, and Corner Condition: Not less than 12-inch long section showing seam, edge, and corner treatment.
4. Valance: Full-size unit, not less than 12 inches long.
5. Frame Finish: Not less than 6-inch lengths.

1.4 INFORMATIONAL SUBMITTALS

- A. Welding certificates.
- B. Sample Warranty: For special warranty.

1.5 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For awnings to include in operation and maintenance manuals.

1.6 QUALITY ASSURANCE

- A. Fabricator Qualifications: Shop that employs skilled workers who custom fabricate products similar to those required for this Project and whose products have a record of successful in-service performance.
- B. Installer Qualifications: Fabricator of products.
- C. Welding Qualifications: Qualify procedures and personnel according to the following:
  1. AWS D1.1/D1.1M, "Structural Welding Code - Steel."
  2. AWS D1.2/D1.2M, "Structural Welding Code - Aluminum."

1.7 WARRANTY

- A. Special Warranty: Manufacturer and fabricator agree to repair or replace components of awnings that fail in materials or workmanship within specified warranty period.
  1. Failures include, but are not limited to, the following:
    - a. Structural failures including framework.
    - b. Deterioration of fabric including seam failure.
    - c. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
    - d. Faulty operation of operator.
  2. Awning Warranty Period: Five years from date of Substantial Completion.
  3. Fabric Warranty Period: Eight years from date of Substantial Completion.
  4. Thread Warranty Period: Eight years from date of Substantial Completion.
  5. Graphics Warranty Period: Outdoor durability not less than Five years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes.
  - 1. Temperature Change: 120 deg F ambient; 180 deg F material surfaces
- B. Fire-Test-Response Characteristics: Provide awning fabrics with the fire-test-response characteristics indicated, as determined by testing identical products according to test method indicated below by UL or another testing and inspecting agency acceptable to authorities having jurisdiction:
  - 1. Flame-Resistance Ratings: Passes NFPA 701
  - 2. Surface-Burning Characteristics: Comply with ASTM E84; testing by a qualified testing agency for Flame-Spread Index of **25** or less.
  - 3. Permanently attach label to each awning fabric indicating whether fabric is inherently and permanently flame resistant or is treated with flame-retardant chemicals, and whether it requires retreatment after designated time period or cleaning.

### 2.2 MANUFACTURERS

- 1. Dial Tent & Awning in Saginaw, MI.
- 2. Mid-Michigan Canvas & Awning Company in Flint, MI.
- 3. Or other approved by Architect.

### 2.3 FABRIC

- A. Basis of Design for arched awning by A. Hoffman Awning Co. in Baltimore, MD.
- B. Fabric:
  - 1. Fiber Content: Sunbrella Fabric or Vinyl Material
  - 2. Width: Indicated on drawings.
  - 3. Applied Treatment: Stain resistant, Mildew resistant Polymer, flame resistant Water repellent
  - 4. Pattern and Color: Selected by Architect from manufacturer full range.
- C. Seam Thread: 100 percent expanded PTFE or 100 percent bonded polyester UV-light, mildew, and rot resistant.

### 2.4 AWNING FRAME AND ACCESSORY MATERIALS

- A. Steel:
  - 1. Steel Plates, Shapes, and Bars: ASTM A36/A36M.
  - 2. Steel Tubing: ASTM A500/A500M.
  - 3. Galvanized Steel Tubing: ASTM A787/A787M.
  - 4. Steel Pipe: ASTM A53/A53M, Standard Weight (Schedule 40).

- B. Aluminum: Alloy and temper recommended by awning manufacturer for type of use and finish indicated and with not less than the strength and durability properties of alloy and temper required by structural loads.
1. Aluminum Plate and Sheet: ASTM B209
  2. Aluminum Extrusions: ASTM B221
  3. Extruded Structural Pipe and Round Tubing: ASTM B429/B429M, standard weight (Schedule 40).
  4. Drawn Seamless Tubing: ASTM B210
- C. Anchors, Fasteners, Fittings, Hardware, and Installation Accessories: Complying with performance requirements indicated and suitable for exposure conditions, supporting structure, anchoring substrates, and installation methods indicated. Corrosion-resistant or noncorrodible units; weather-resistant, tamperproof, vandal- and theft-resistant, compatible, non staining materials. Provide as required for awning assembly, mounting, and secure attachment. Number as needed to comply with performance requirements and to maintain uniform appearance; evenly spaced. Where exposed to view, provide finish and color as selected by Architect from manufacturer's full range.
1. Wood Screws: ASME B18.6.1.
  2. Lag Bolts: ASME B18.2.1
  3. Zinc-Coated High-Strength Bolts, Nuts, and Washers: ASTM F3125/F3125 M, Grade A325 Type 1, heavy-hex steel structural bolts; ASTM A563, Grade DH, heavy-hex carbon-steel nuts; and ASTM F436/F436M, Type 1, hardened carbon-steel washers, zinc coated.
  4. Expansion Anchors: Anchor bolt and sleeve assembly with capability to sustain, without failure, a load equal to six times the load imposed when installed in unit masonry assemblies and equal to four times the load imposed when installed in concrete as determined by testing according to ASTM E488 conducted by a qualified independent testing and inspecting agency.
    - a. Material: Stainless steel with bolts and nuts complying with ASTM F593 and ASTM F594, Alloy Group 1 or 2
  5. Adhesive-Bonded Anchors: Anchor bolt and sleeve assembly with capability to sustain, without failure, a load equal to six times the load imposed when installed in unit masonry assemblies and equal to four times the load imposed when installed in concrete as determined by testing according to ASTM E1512 conducted by a qualified independent testing and inspecting agency.
    - a. Material: Stainless steel with bolts and nuts complying with ASTM F593 and ASTM F594, Alloy Group 1 or 2
  6. Grommets: Stainless steel, No. 2
  7. Lacing: 100 percent polyester, braided No. 4
- D. Galvanizing Repair Paint: High-zinc-dust-content paint for regalvanizing welds in steel, complying with SSPC-Paint 20.
- E. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D1187.

## 2.5 AWNING FABRIC FABRICATION

- A. Fabrication: Reinforce wear points and hardware attachment points with nonwoven, mesh, or polypropylene mesh webbing. Seam fabrics as follows:
  - 1. Fabric Edges and Seams: Fold and stitch selvedge and cut fabric edges.
  - 2. Fabric Edges and Seams: Hot cut and sealed.
  - 3. Fabric Edges and Seams: Radio-frequency welded.
  - 4. Fabric Edges and Seams: Adhesively bonded.
  - 5. Fabric Edges and Seams: Manufacturer's standard hemming and seaming methods.
  - 6. Fabric Attachment: Manufacturer's standard
  - 7. Fabric Attachment: Grommets.
    - a. Grommet Spacing: [6 inches o.c.]
- B. Fabric Insets: Heat-sealed process.
- C. Graphic Application: Silk-screen printing, Heat color transfer, or Vinyl film with pressure-sensitive adhesive backing
  - 1. Graphic Image: Final version to be verified and approved by owner and Architect. Logo font, size, and color requirements provided by owner.
  - 2. Text Message: Final version to be verified and approved by owner and Architect. Logo font, size, and color requirements provided by owner.
  - 3. Vinyl Film: Calendered-vinyl film, not less than 3 mils (0.076 mm) thick, with pressure-sensitive adhesive backing

## 2.6 FIXED AWNING FABRICATION

- A. Basis of Design for arched awning by A. Hoffman Awning Co. in Baltimore, MD.
  - 1. Frame Fabrication: Fabricate awning frames from aluminum. Preassemble in shop to greatest extent possible. Disassemble units only as necessary for shipping and handling limitations. Use connections that maintain structural value of joined pieces. Clearly mark units for reassembly and coordinated installation. Form bent-metal corners to smallest radius possible without causing grain separation or otherwise impairing work.
  - 2. Form exposed work true to line and level with accurate angles and surfaces and straight edges.
  - 3. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners where possible. Fabricate slip-fit connections exposed to weather in a manner to exclude water. Provide weep holes where water may accumulate.
  - 4. Weld corners and connections continuously. Obtain fusion without undercut or overlap. Remove welding flux immediately. At exposed corners and connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing and contour of welded surface matches that of adjacent surface.

5. Provide for anchorage of type indicated; coordinate with supporting structure. Space anchoring devices to secure awnings in place and to properly transfer loads.
- B. Aluminum Finish: Manufacturer's standard primed and top-coated decorative finish complying with finish manufacturer's written instructions for surface preparation including pretreatment, application, baking, and minimum dry film thickness.
1. Color: As selected by Architect from manufacturer's full range

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for supporting members, blocking, inserts, installation tolerances, and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.2 INSTALLATION

- A. General: Install awnings at locations and in position indicated, securely connected to supports, free of rack, and in proper relation to adjacent construction. Use mounting methods of types described and in compliance with Shop Drawings and fabricator's written instructions.
- B. Install awnings after other finishing operations, including joint sealing and painting, have been completed.
- C. Slip fit frame connections accurately together to form hairline joints, and tighten to secure.
- D. Weld frame connections that are not to be left as exposed joints but cannot be shop welded because of shipping size limitations.
  1. Field Welding: Comply with the following requirements:
    - a. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
    - b. Obtain fusion without undercut or overlap.
    - c. Remove welding flux immediately.
    - d. At exposed connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing and contour of welded surface matches that of adjacent surface.
- E. Anchoring to In-Place Construction: Use anchors, fasteners, fittings, hardware, and installation accessories where necessary for securing awnings to structural support and for properly transferring load to in-place construction.



- F. Corrosion Protection: Coat concealed surfaces of aluminum that come in contact with grout, concrete, masonry, wood, or dissimilar metals with a heavy coat of bituminous paint.
- G. Coordinate awning installation with flashing and joint-sealant installation so these materials are installed in sequence and in a manner that prevents exterior moisture from passing through completed exterior wall and roof assemblies.

### 3.3 CLEANING AND PROTECTION

- A. Touch up factory-applied finishes to restore damaged or soiled areas.
- B. Galvanized Surfaces: Clean field welds, connections, and abraded areas and repair galvanizing to comply with ASTM A780.

END OF SECTION 107313