

SPECIFICATIONS

FOR

INDIANA LABORERS' TRAINING TRUST FUND
439 PATTON HILL ROAD
BEDFORD, INDIANA 47421

BUILDING ADDITION

MICHAEL R. WALDBIESER



ENGINEERING & CONSULTING, INC.
STRUCTURAL, PLUMBING, MECHANICAL, & ELECTRICAL DESIGN



SYCAMORE BUILDING
19 SOUTH 6th STREET, SUITE 804
TERRE HAUTE, INDIANA 47807

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Michael R. Waldbieser

SET NO. _____

May 01, 2019

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NOTICE TO BIDDERS
INDIANA LABORERS' TRAINING TRUST FUND
BUILDING RENOVATION
439 PATTON HILL ROAD, BEDORD, INDIANA 47421

Notice is hereby given that sealed bids will be received

By: Indiana Laborers' Training Trust Fund
439 Patton Hill Road
Bedford, Indiana 47421

For: Indiana Laborers' Training Trust Fund
Building Renovation
439 Patton Hill Road
Bedford, Indiana 47421

At: Indiana Laborers' Training Trust Fund
439 Patton Hill Road
Bedford, Indiana 47421

Until: 2:00 p.m. local time
May 23, 2019
Bids received after that time will be returned unopened.

Bid opening: Bids will be privately opened.

Bid Documents: Bid documents will be available for distribution on
May 02, 2019

The Owner will receive sealed bids for bid packages as listed in the contract documents.

Bids shall be executed on the forms provided. Bids shall be delivered in a sealed opaque envelope showing the Bidder's name, address, and marked :

Indiana Laborers' Training Trust Fund
Building Renovation
439 Patton Hill Road
Bedford, Indiana 47421

Each bid proposal shall include all labor, material, and services necessary to complete the portion of the project in the indicated bid package in strict accordance with the drawings and specifications as prepared and on file in the offices of:

NOTICE TO BIDDERS
INDIANA LABORERS' TRAINING TRUST FUND
BUILDING RENOVATION
439 PATTON HILL ROAD, BEDORD, INDIANA 47421

The Engineer: Michael R. Waldbieser
Engineering and Consulting, Inc.
Sycamore Building
19 S. Sixth Street, Suite 804
Terre Haute, Indiana 47807
Phone: (812) 232-6510

Plan Room: Rapid Reproductions, Inc.
129 South 11th Street
Terre Haute, Indiana 47807
Phone: (812) 238-1681
Copies may be purchased from Rapid Reproductions.

Electronic copies of the bidding documents, in pdf format, may be obtained by contacting Mr. Michael R. Waldbieser at (812) 232-6510. Copies may be purchased from Rapid Reproductions, Inc. (812) 238-1681.

Bidder shall provide pricing for base and alternate scopes of work as identified in project specifications and construction drawings for the construction of the Building Renovation, located at 439 Patton Hill Road, Bedford, Indiana 47421.

Bids shall be properly and completely executed in accordance with the instructions and supplementary instructions to bidders and shall be submitted on the attached Bid Form contained in the bidding documents.

Bid Bond is required

Performance & Payment Bond is required

Certified Payroll is required

Safety Audits are required for each Contractor on the project.

Other required documents to be submitted with the bid include the following:

Section 00300 – Bid Form attached to Bid Documents

Section 00500 – Sub-Contractors Listing

Pending approval of the project by Indiana Laborers' Training Trust Fund, it is the intent of the Indiana Laborers' Training Trust Fund to award the contract based on the bid prices received and the funds available for the project. However, the Owner may accept the lowest responsible and responsive bid; accept the lowest responsible and responsive bid for the base bid plus any or all alternate(s), or reject all bids. The contract will not necessarily be awarded to the lowest

NOTICE TO BIDDERS
INDIANA LABORERS' TRAINING TRUST FUND
BUILDING RENOVATION
439 PATTON HILL ROAD, BEDORD, INDIANA 47421

responsible and responsive bidder on the base bid alone.

The successful bidder will be required to furnish insurance covering Workmen's Compensation, Public Liability, and Property Damage and any other which may be required, before the contract can be signed and issued.

Indiana State Gross Retail and Use Tax **shall not** be included in the Bid Price, as Indiana Laborers' Training Trust Fund is tax **exempt**. The provision shall apply both to transactions between Indiana Laborers' Training Trust Fund and the Contractor, the Contractor and any Subcontractors, and to transactions between the material suppliers and the Contractor.

The Owner reserves the right to waive any and all formalities and informalities or to reject any and all bids. The Owner shall accept bids which, in his judgement, are in his own best interests. Bids received after the time set to receive bids shall be returned unopened.

Indiana Laborers' Training Trust Fund is committed to equal opportunity employment without regard to race, religion, physical or mental disability, age, veteran status, color, creed, national origin, or sex. Contractor participation in a MBE/WBE program is encouraged by the Owner.

Prospective Bidders may visit the site during normal business hours.
Questions during the bidding period should be directed to Michael R. Waldbieser
(812) 232-6510.

Each Bidder submitting a Bid represents that he has read and understands the Bidding Documents and Scope of Work. Each Contractor represents that he has visited the site and has adequately familiarized himself with the existing conditions. No additional cost to the Owner will be allowed due to the Contractor's failure to avail him of a complete and thorough on-site inspection of existing conditions.

Whenever products or materials are specified as "Standards" or they are otherwise named, approval of other equal quality products shall be obtained by requesting in writing and presenting for evaluation such product or material to the Engineer no later than 2:00 p.m., May 20th, 2019. Submittals circumventing the above time frame will not be processed. Substitutions will be considered from Bidders only:

1. If approval is granted, product or material will be added by addendum.
2. No direct reply will be made to any requests for changes, but any requested changes approved by the Engineer will be stated in an addendum issued to all Bidders.

NOTICE TO BIDDERS
INDIANA LABORERS' TRAINING TRUST FUND
BUILDING RENOVATION
439 PATTON HILL ROAD, BEDORD, INDIANA 47421

3. Addendums and clarifications to bidding/construction documents shall be distributed via email or faxed to bidders not later than May 21st, 2019.

The construction hereby contemplated is to be governed, at all times, by applicable provisions of the Indiana and Federal Law(s), including, but not limited to, the latest Amendments of the following:

- 1) Williams-Steiger Occupational Safety and Health Act of 1970, Public Law 91-596.
- 2) Part 1910 - Occupational Safety and Health Standards, Chapter VIII of Title 29, Code of Federal Regulations.
- 3) Part 1926 - Safety and Health Regulations for Construction, Chapter XIII of Title 29, Code of Federal Regulations.

It is to be understood by all Contractors that the construction work covered by these documents shall be contracted to contractors and sub-contractors that shall be bound by the terms of Collective Bargaining Agreements with the Local Unions existing in Lawrence County, Indiana as determined and interpreted by the "TRUSTEES".

An individual in good standing with LIUNA shall be on site during all construction activities and employed by the General Contractor on the project.

All Contractors and Sub-Contractors must provide a letter stating that all benefits are paid up to date before any Contract will be signed for Construction.

End of Section

INFORMATION FOR BIDDERS

1. RECEIPT AND OPENING OF BIDS.

Indiana Laborers' Training Trust Fund (herein called the owner), invites bids on the attached Bid Form with Non-Collusion Affidavit with all blanks of which must be appropriately filled in. Bids will be received at the office of Indiana Laborers' Training Trust Fund, 439 Patton Hill Road, Bedford, Indiana 47421, until the date and time indicated in the "Instructions to Bidders" portion of these written specifications. The bids will be a privately opened by the Owner.

2. QUALIFICATION OF BIDDER.

The Owner may make such investigations as he deems necessary to determine the ability of the bidder to perform the work, and the bidders shall furnish to the Owner, all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the Owner that such bidder is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein. Conditional bids will not be accepted.

3. CONDITIONS OF WORK.

Each bidder must inform himself fully of the conditions relating to the construction of the project and the employment of labor therein. Failure to do so will not relieve a successful bidder of his obligation to furnish all material and labor necessary to carry out the provisions of his contract.

4. ADDENDA AND INTERPRETATIONS.

No interpretation of the meaning of the plans, specifications, or other pre-bid documents will be made to the bidder orally. Every request for such interpretation should be in writing, addressed to Michael R. Waldbieser Engineering & Consulting Inc., 19 South 6th Street, Suite 804, Terre Haute, Indiana 47807 and addressed to Mr. Michael Waldbieser for consideration, must be received as directed in the "Notice to Bidders". Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be distributed as directed in the "Notice to Bidders". Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under his bid as submitted. Addenda so issued shall become part of the contract documents.

5. OBLIGATION OF BIDDER.

At the time of the opening of bids, each bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the plans and contract documents (including all addenda). The failure of omission of any bidder to examine any form, instrument or document, shall in no way relieve any bidder from any obligation in respect to this bid.

6. TIME OF COMPLETION.

Bidder must agree to commence work on or before a date to be specified in a written "Notice to Proceed" from the Owner and to fully complete the project in a time frame agreed to with the Owner. Provide preliminary schedule with the bid for time of completion for the project.

INSTRUCTIONS TO BIDDERS

PROJECT: Indiana Laborers' Training Trust Fund
Building Renovation
439 Patton Hill Road
Bedford, Indiana 47421

OWNER: Indiana Laborers' Training Trust Fund
439 Patton Hill Road
Bedford, Indiana 47421

CONTACT: Mr. Sean Coakley

BIDS: Due by: Thursday May 23rd, 2019 at 2:00 PM Local Time
At Offices: Indiana Laborers' Training Trust Fund
439 Patton Hill Road
Bedford, Indiana 47421

Sealed Bids

Bid on attached form - Bid Form with Non-Collusion Affidavit

Bid Bond - Required

Performance & Payment Bond - Required

Mark Envelope - Indiana Laborers' Training Trust Fund
Building Renovation
439 Patton Hill Road
Bedford, Indiana 47421

Start Date - As soon as Owner awards Contract.

Bids to be good for 60 days from date which bid are due.

Finish Date - Coordinated with Owner

Contract - Contract to be prepared by the Owner.

DOCUMENTS:

Engineers Drawings

Engineers Specifications

Instructions to Bidders

AIA A201-2007 General Conditions of the Contract for Construction

Supplemental General Conditions

Electronic copies of the bidding documents, in pdf format, may be obtained by contacting Mr. Michael R. Waldbieser at (812) 232-6510.

Copies may be purchased from Rapid Reproductions, Inc. (812) 238-1681.

Rapid Reproductions Inc.
129 South 11th Street
Terre Haute, Indiana 47807.
Phone 238-1681.

After bidding, it is requested that the unsuccessful Contractors return their set of drawings to the Owner.

CONTRACTORS RESPONSIBILITY:

- A. Direct questions to the Engineer.
- B. Contractor shall visit the site and familiarize himself with the work.
- C. The Contractor shall leave the site in as clean condition as before the construction.
- D. General Contractor shall obtain all necessary construction permits for the project.
- E. State approvals will be obtained by Engineer.
- F. The Contractor shall coordinate with the Owner when work is to begin.
- G. The Owner **is not** subject to Indiana Sales Tax and such tax should **not** be included in the bids.
- H. If the Contractors discover any discrepancy on the drawings or in the specifications, they shall report the same to the Engineer before proceeding with any work affected by the discrepancy, and shall be held responsible for the results should he fail to make such report.
- I. Refer to Section 1010 SUMMARY OF WORK for work included in this contract.

GENERAL CONDITIONS:

- A. The drawings are for reference only. The Contractors shall verify all existing site conditions.
- B. The Owner is to have access to the site at all times.
- C. The Contractors shall provide all barricades and traffic control devices.
- D. The Contractors shall provide directional signs for pedestrians and place as directed by the Owner.
- E. Explosives are prohibited on this project.
- F. The Contractors shall clean roadways and surroundings on a daily basis.
- G. The staging of materials shall be approved by the Owner.
- H. Any sidewalks damaged during construction shall be replaced by the General Contractor at no charge to the Owner.

MAINTENANCE:

- A. The Contractors shall maintain the grounds within the project.
- B. The Contractors shall protect all existing walls, glass, and existing buildings. Damaged areas are to be brought back to original condition.

DEMOLITION:

- A. The Contractors are to remove and dispose of all debris in a legal manner.
- B. The Contractors shall maintain dust control at all times.
- C. Remove all existing construction shown on the drawings and referred to in the specifications.
- D. Remove all materials associated with the demolition work from the site.

SCOPE OF WORK: (ADDITIONAL ITEMS MAY APPLY)

- A. Install all safety barricades.
- B. Remove existing construction as necessary and as stated on the drawings in order to install the new work under this contract.
- C. Construct building renovations as shown on the drawings and in the written specifications.
- D. Remodeling of the dormitory rooms/restrooms of the project must be coordinated with the Owner. The Contractor and Sub-Contractors will be given 12 rooms at a time for work. These 12 rooms will be 4 rooms per floor and stacked vertically due to existing water supply layout.
- E. Construction Sequence:

(Phase 1 – to start)

Dorms: Contractor can work on four (4) rooms and two (2) bathrooms per floor (vertically). Three Floors - Total of twelve (12) dorm rooms and six (6) bathrooms at one time. Beginning at the back of hall and moving forward.

Office: Contractor can work on the Office, Board Room, Main Entrance and Reception Area.

Downstairs –

Restrooms – Locker Room: Contractor can work on one restroom area at a time – Men - Women – Handicap

(Phase 2)

Library: After the office area and main entrances are done, Contractor can go to Library – Dining Room & Lounge.

**CONTRACTOR'S BID
PART I**

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

Bidder (Firm): _____

Address: _____ P.O. Box _____

City/State/Zip: _____

Telephone Number: _____ Fax Number: _____

Federal ID Number: _____

E-Mail Address: _____

Person to contact regarding this bid (printed): _____

Pursuant to notices given, the undersigned offers to furnish labor and/or material necessary to complete the project of "Laborers' Training Trust Fund – Building Renovation" in accordance with plans and specifications prepared by Michael R. Waldbieser Engineering & Consulting, Inc. in Terre Haute, Indiana for the sum of:

BASE BID AMOUNT

_____ Dollars (_____)
(Sum in Words) (Sum in Figures)

ALTERNATE #1 BID AMOUNT – Paint Dormitory Corridor Walls. Typical of 3.

_____ Dollars (_____)
(Sum in Words) (Sum in Figures)

ALTERNATE #2 BID AMOUNT – Install New Sink Base Vanity and Top in Dormitory Restrooms. Typical of 30.

_____ Dollars (_____)
(Sum in Words) (Sum in Figures)

ALTERNATE #3 BID AMOUNT – Install VCT Instead of Sheet Vinyl Flooring in Dormitory Restrooms. Typical of 30.

_____ Dollars (_____)
(Sum in Words) (Sum in Figures)

BID BOND

Bid Bond is required on this project.

PERFORMANCE & PAYMENT BOND

Performance & Payment Bond is required on this project.

PROPOSAL TIME

Provide the Owner the number of weeks to complete the project.

Number of weeks to finish project _____.

ADDENDUM ACKNOWLEDGEMENT

The undersigned acknowledges receipt of the following Addenda:

Addendum No. _____ Dated _____

Addendum No. _____ Dated _____

Addendum No. _____ Dated _____

Addendum No. _____ Dated _____

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

PART 2

CONTRACTOR'S NON – COLLUSION AFFIDAVIT

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

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

SECTION V OATH AND AFFIRMATION

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

Dated at _____ this _____ day of _____, _____

(Name of Organization)

By _____

(Title of Person Signing)

ACKNOWLEDGEMENT

STATE OF _____)
COUNTY OF _____) ss

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

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

Notary Public

My Commission Expires: _____

County of Residence: _____

SUB-CONTRACTORS LISTING

For: Indiana Laborers' Training Trust Fund
Building Renovation
439 Patton Hill Road
Bedford, Indiana 47421

Owner: Indiana Laborers' Training Trust Fund
439 Patton Hill Road
Bedford, Indiana 47421

Engineer: Michael R. Waldbieser
Engineering & Consulting, Inc.
Sycamore Building
19 South 6th Street, Suite 804
Terre Haute, Indiana 47807

List of Sub-Contractors:

Gypsum Board Contractor: _____

Rough Framing Contractor: _____

Insulation Contractor: _____

Floor Finish Contractor: _____

Window Replacement Contractor: _____

Acoustical Ceiling Contractor: _____

Painting Contractor: _____

Plumbing Contractor: _____

HVAC Contractor: _____

Electrical Contractor: _____

State Form 49065 R4/ 8-05

Indiana Department of Revenue

Sales tax must be charged unless all information in each section is fully completed by the purchaser. Purchasers not able to provide all required information must pay the tax and may file a claim for refund (Form GA-110L) directly with the Department of Revenue.

Business Address P.O. Box 758 City Bedford State IN Zip 47421

State ID: 0003141217-000

TID and LOC Number as shown on your Certificate.....Tax ID: 712542-09

LOC# (3 digits)

35-6079079 - (FED. ID #)

State of Issue

State ID#

State of Issue

Description of items to be purchased.

☐ Other - explain.

Date _____

Sean Goakley

Title

DIRECTOR

Seller must keep this certificate on file to support exempt sales.

AIA Document A201-2007 General Conditions of the Contract for Construction

The following 39 pages in the specification book is AIA Document A201-2007 General Conditions of the Contract for Construction. Wherever the word “Architect” is used, replace with the word “Engineer”.



AIA[®] Document A201[™] – 2007

General Conditions of the Contract for Construction

for the following PROJECT:

(Name and location or address)

Indiana Laborers' Training Trust Fund Building Renovation
Indiana Laborers' Training Trust Fund
439 Patton Hill Road
Bedford, Indiana 47421

THE OWNER:

(Name, legal status and address)

Indiana Laborers' Training Trust Fund
439 Patton Hill Road
Bedford, Indiana 47421

THE ARCHITECT:

(Name, legal status and address)

Michael R Waldbieser Engineering & Consulting, Inc.
19 South 6th Street, Suite 804
Terre Haute, Indiana 47807

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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.

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ARTICLE 1 GENERAL PROVISIONS

§ 1.1 BASIC DEFINITIONS

§ 1.1.1 THE CONTRACT DOCUMENTS

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

§ 1.1.2 THE CONTRACT

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

§ 1.1.3 THE WORK

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

§ 1.1.4 THE PROJECT

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

§ 1.1.5 THE DRAWINGS

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

§ 1.1.6 THE SPECIFICATIONS

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

§ 1.1.7 INSTRUMENTS OF SERVICE

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

§ 1.1.8 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.

§ 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.

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

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

§ 1.3 CAPITALIZATION

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

§ 1.4 INTERPRETATION

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

§ 1.5 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS AND OTHER INSTRUMENTS OF SERVICE

§ 1.5.1 The Architect and the Architect’s consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and will retain all common law, statutory and 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’s 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 provided to them solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and 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 shall endeavor to establish necessary protocols governing such transmissions, unless otherwise already provided in the Agreement or the Contract Documents.

ARTICLE 2 OWNER

§ 2.1 GENERAL

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

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

§ 2.2 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 those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities.

§ 2.2.3 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. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.

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

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

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

§ 2.4 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 ten-day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such deficiencies. In such case an appropriate Change Order shall be issued deducting from payments then or thereafter due the Contractor the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the Architect's additional services made necessary by such default, neglect or failure. Such action by the Owner and amounts charged to the Contractor are both subject to prior approval of the Architect. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner.

ARTICLE 3 CONTRACTOR

§ 3.1 GENERAL

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

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

§ 3.1.3 The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect in the Architect's 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 Architect any errors, inconsistencies or omissions discovered by or made known to the Contractor as a request for information in such form as the 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 Architect any nonconformity discovered by or made known to the Contractor as a request for information in such form as the 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.

§ 3.3 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 instructions 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 and Architect and shall not proceed with that portion of the Work without further written instructions from the Architect. If the Contractor is then instructed to proceed with the required means, methods, techniques, sequences or procedures without acceptance of changes proposed by the Contractor, the Owner shall be solely responsible for any loss or damage arising solely from those Owner-required means, methods, techniques, sequences or procedures.

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

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

§ 3.4 LABOR AND MATERIALS

§ 3.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other

facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

§ 3.4.2 Except in the case of minor changes in the Work authorized by the 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 and in accordance with a Change Order or Construction Change Directive.

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

§ 3.5 WARRANTY

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

§ 3.6 TAXES

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

§ 3.7 PERMITS, FEES, NOTICES AND COMPLIANCE WITH LAWS

§ 3.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permit as well as 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 knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

§ 3.7.4 Concealed or Unknown Conditions. If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature, that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the Owner and the Architect before conditions are disturbed and in no event later than 21 days after first observance of the conditions. The Architect will promptly investigate such conditions and, if the Architect determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend an equitable adjustment in the Contract Sum or Contract Time, or both. If the Architect determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Architect shall promptly notify the Owner and Contractor in writing, stating the reasons. If either party disputes the Architect's determination or recommendation, that party may proceed as provided in Article 15.

§ 3.7.5 If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall notify the Owner 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 may be made as provided in Article 15.

§ 3.8 ALLOWANCES

§ 3.8.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, 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 more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 3.8.2.1 and (2) changes in Contractor's costs under Section 3.8.2.2.

§ 3.8.3 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.

§ 3.9.2 The Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner through the Architect the name and qualifications of a proposed superintendent. The Architect may reply within 14 days to the Contractor in writing stating (1) whether the Owner or the Architect has reasonable objection to the proposed superintendent or (2) that the Architect requires additional time to review. Failure of the Architect to reply within the 14 day period shall constitute notice of no reasonable objection.

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

§ 3.10 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 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 to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work.

§ 3.10.2 The Contractor shall prepare a submittal schedule, promptly after being awarded the Contract and thereafter as necessary to maintain a current submittal schedule, and shall submit the schedule(s) for the Architect's approval. The Architect's approval shall not unreasonably be delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, and (2) allow the Architect reasonable time to review submittals. 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 perform the Work in general accordance with the most recent schedules submitted to the Owner and Architect.

§ 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 shall be available to the Architect and shall be delivered to the Architect 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 to illustrate materials or equipment for some portion of the Work.

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

§ 3.12.4 Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. Their purpose is to demonstrate 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 is subject to the limitations of Section 4.2.7. Informational submittals upon which the Architect is not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Architect without action.

§ 3.12.5 The Contractor shall review for compliance with the Contract Documents, approve and submit to the Architect Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of separate contractors.

§ 3.12.6 By submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents to the Owner 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 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 approval of Shop Drawings, Product Data, Samples or similar submittals unless the Contractor has specifically informed the Architect in 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 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

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

§ 3.14 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 or separate 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 or a separate contractor except with written consent of the Owner and of such separate contractor; such consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold from the Owner or a separate contractor the Contractor's consent to cutting or otherwise altering the Work.

§ 3.15 CLEANING UP

§ 3.15.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials 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 may do so and Owner shall be entitled to reimbursement from the Contractor.

§ 3.16 ACCESS TO WORK

The Contractor shall provide the Owner 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 shall hold the Owner and Architect harmless from loss on account thereof, 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 or Architect. 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.

§ 3.18 INDEMNIFICATION

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

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

ARTICLE 4 ARCHITECT

§ 4.1 GENERAL

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

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

§ 4.1.3 If the employment of the Architect is terminated, the Owner shall employ a successor architect as to whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the Architect.

§ 4.2 ADMINISTRATION OF THE CONTRACT

§ 4.2.1 The Architect will provide administration of the Contract as described in the Contract Documents and will be an Owner's representative during construction until the date the Architect issues the final Certificate for Payment. The 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 as otherwise agreed with the Owner, to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The Architect will not have control over, charge of, or responsibility for, the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents, except as provided in Section 3.3.1.

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

§ 4.2.4 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 Architect about matters arising out of or relating to the Contract. 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 separate contractors shall be through the Owner.

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

§ 4.2.6 The Architect has authority to reject Work that does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable, the Architect will have authority to require inspection or testing of the Work in accordance with Sections 13.5.2 and 13.5.3, whether or not such Work is fabricated, installed or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons or entities performing portions of the Work.

§ 4.2.7 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. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The 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 Architect's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the 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.

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

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

§ 4.2.10 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.

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

§ 4.2.12 Interpretations and decisions 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 and decisions, the Architect will endeavor to secure faithful performance by both Owner and Contractor, will not show partiality to either and will not be liable for results of interpretations or decisions rendered in good faith.

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

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

ARTICLE 5 SUBCONTRACTORS

§ 5.1 DEFINITIONS

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

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

§ 5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

§ 5.2.1 Unless otherwise stated in the Contract Documents or the bidding requirements, the Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner through the Architect the names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each principal portion of the Work. The Architect may reply within 14 days to the Contractor in writing stating (1) whether the Owner or the Architect has reasonable objection to any such proposed person or entity or (2) that the Architect requires additional time for review. Failure of the Owner or Architect to reply within the 14-day period shall constitute notice of no reasonable objection.

§ 5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner 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 or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner 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 or Architect makes reasonable objection to such substitution.

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

be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

§ 5.4 CONTINGENT ASSIGNMENT OF SUBCONTRACTS

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

- .1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Section 14.2 and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor 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 shall be equitably adjusted for increases in cost resulting from the suspension.

§ 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. If the Owner assigns the subcontract to a successor contractor or other entity, the Owner shall nevertheless remain legally responsible for all of the successor contractor's obligations under the subcontract.

ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

§ 6.1 OWNER'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS

§ 6.1.1 The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and to award separate 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 and waiver of subrogation. If the Contractor claims that delay or additional cost is involved because of such action by the Owner, the Contractor shall make such Claim as provided in Article 15.

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

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

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

§ 6.2 MUTUAL RESPONSIBILITY

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

§ 6.2.2 If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a separate contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the 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 or separate contractor's 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 that are payable to a separate contractor because of the Contractor's delays, improperly timed activities or defective construction. The Owner shall be responsible to the Contractor for costs the Contractor incurs because of a separate contractor's delays, improperly timed activities, damage to the Work or defective construction.

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

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

§ 6.3 OWNER'S RIGHT TO CLEAN UP

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

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, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

§ 7.1.2 A Change Order shall be based upon agreement among the Owner, Contractor and Architect; a Construction Change Directive requires agreement by the Owner 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.

§ 7.2 CHANGE ORDERS

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

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

§ 7.3 CONSTRUCTION CHANGE DIRECTIVES

§ 7.3.1 A Construction Change Directive is a written order prepared by the Architect and signed by the Owner 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 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.

§ 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 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.

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

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

§ 7.4 MINOR CHANGES IN THE WORK

The Architect 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 signed by the Architect 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 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.

§ 8.3 DELAYS AND EXTENSIONS OF TIME

§ 8.3.1 If the Contractor is delayed at any time in the commencement or progress of the Work by an act or neglect of the Owner or Architect, or of an employee of either, or of a separate contractor employed by the Owner; or by changes ordered in the Work; or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties or other causes beyond the Contractor's control; or by delay authorized by the Owner pending mediation and arbitration; or by other causes that the Architect determines may justify delay, then the Contract Time shall be extended by Change Order for such reasonable time as the Architect may determine.

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

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

ARTICLE 9 PAYMENTS AND COMPLETION

§ 9.1 CONTRACT SUM

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

Where the Contract is based on a stipulated sum or Guaranteed Maximum Price, the Contractor shall submit to the Architect, before the first Application for Payment, 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 Architect may require. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment.

§ 9.3 APPLICATIONS FOR PAYMENT

§ 9.3.1 At least ten days before the date established for each progress payment, the Contractor shall submit to the Architect an itemized Application for Payment prepared in accordance with the schedule of values, if required under Section 9.2, 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 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 Architect, but not yet included in Change Orders.

§ 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.

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

§ 9.3.3 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information and belief, be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, Subcontractors, 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 The Architect will, within seven days after receipt of the Contractor's Application for Payment, either issue to the Owner a Certificate for Payment, with a copy to the Contractor, for such amount as the Architect determines is properly due, or notify the Contractor and Owner in writing of the Architect's reasons for withholding certification in whole or in part as provided in Section 9.5.1.

§ 9.4.2 The issuance of a Certificate for Payment will constitute a representation by the Architect to the Owner, based on the Architect's evaluation of the Work and the data comprising the Application for Payment, that, to the best of the Architect's knowledge, information and belief, the Work has progressed to the point indicated and that the quality of the Work is in accordance with the Contract Documents. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion and to specific qualifications expressed by the Architect. The issuance of a Certificate for Payment will further constitute a representation that the Contractor is entitled to payment in the amount certified. However, the issuance of a Certificate for Payment will not be a representation that the Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work, (2) reviewed construction means, methods, techniques, sequences or procedures, (3) reviewed copies of requisitions received from Subcontractors and 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 Architect may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Architect's opinion the representations to the Owner required by Section 9.4.2 cannot be made. If the Architect is unable to certify payment in the amount of the Application, the Architect will notify the Contractor and Owner as provided in Section 9.4.1. If the Contractor and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Certificate for Payment previously issued, to such extent as may be necessary in the Architect's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from acts and omissions described in Section 3.3.2, because of

- .1 defective Work not remedied;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims unless security acceptable to the Owner is provided by the Contractor;

- .3 failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or a separate contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
- .7 repeated failure to carry out the Work in accordance with the Contract Documents.

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

§ 9.5.3 If the Architect withholds certification for payment under Section 9.5.1.3, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or 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 Architect will reflect such payment on the next Certificate for Payment.

§ 9.6 PROGRESS PAYMENTS

§ 9.6.1 After the Architect has issued a 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 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 Architect 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 Architect and Owner on account of portions of the Work done by such Subcontractor.

§ 9.6.4 The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and 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 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 Contractor payments to material and equipment suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.

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

§ 9.6.7 Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Contractor for Work properly performed by Subcontractors 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.

§ 9.7 FAILURE OF PAYMENT

If the Architect does not issue a Certificate for Payment, through no fault of the Contractor, within seven days after receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor within seven days after the date established in the Contract Documents the amount certified by the Architect or awarded by binding dispute resolution, then the Contractor may, upon seven additional days' written notice to the Owner and Architect, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended

appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shut-down, delay and start-up, plus interest as provided for in the Contract Documents.

§ 9.8 SUBSTANTIAL COMPLETION

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

§ 9.8.2 When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the 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 Contractor's list, the Architect 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 Contractor's list, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Architect. In such case, the Contractor shall then submit a request for another inspection by the Architect to determine Substantial Completion.

§ 9.8.4 When the Work or designated portion thereof is substantially complete, the Architect will prepare 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.

§ 9.9 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, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor shall prepare and submit a list to the Architect as provided under Section 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, by decision of the Architect.

§ 9.9.2 Immediately prior to such partial occupancy or use, the Owner, 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.

§ 9.10 FINAL COMPLETION AND FINAL PAYMENT

§ 9.10.1 Upon receipt of the Contractor's written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect will promptly make such inspection and, when the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Architect

will promptly issue a final Certificate for Payment stating that to the best of the Architect's knowledge, information and belief, and on the basis of the Architect's 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 Architect's final 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 (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 and (5), 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 reasonable attorneys' fees.

§ 9.10.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Architect so confirms, the Owner shall, upon application by the Contractor and certification by the 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 prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

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

- .1 liens, Claims, security interests or encumbrances arising out of the Contract and unsettled;
- .2 failure of the Work to comply with the requirements of the Contract Documents; or
- .3 terms of special warranties required by the Contract Documents.

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

ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

§ 10.1 SAFETY PRECAUTIONS AND PROGRAMS

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

§ 10.2 SAFETY OF PERSONS AND PROPERTY

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

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

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

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

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

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

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

§ 10.2.8 INJURY OR DAMAGE TO PERSON OR PROPERTY

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

§ 10.3 HAZARDOUS MATERIALS

§ 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 and Architect in writing.

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

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

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

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

§ 10.4 EMERGENCIES

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

ARTICLE 11 INSURANCE AND BONDS

§ 11.1 CONTRACTOR'S 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 that 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;
- .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.

§ 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 or required by law, 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 filed with the Owner 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 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 on account of revised limits or claims paid under the General Aggregate, or both, shall be furnished by the Contractor with reasonable promptness.

§ 11.1.4 The Contractor shall cause the commercial liability coverage required by the Contract Documents to include (1) 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.

§ 11.2 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 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.

§ 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 Architect's and Contractor'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 property attributable thereto.

§ 11.3.1.3 If the property insurance requires deductibles, the Owner 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.

§ 11.3.2 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, 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. The Owner waives all rights of action against the Contractor for loss of use of the Owner's property, including consequential losses 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 If during the Project construction period the Owner insures properties, real or personal or both, at or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, the Owner shall waive all rights in accordance with the terms of Section 11.3.7 for damages caused by fire or other causes of loss covered by this separate property insurance. All separate policies shall provide this waiver of subrogation by endorsement or otherwise.

§ 11.3.6 Before an exposure to loss may occur, 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 and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents and employees, each of the other, and (2) the Architect, Architect's consultants, separate contractors described in Article 6, if any, and any of their subcontractors, sub-subcontractors, agents and employees, for damages caused by fire or other causes of loss to the extent covered by property insurance obtained pursuant to this Section 11.3 or other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by the Owner as fiduciary. The Owner or Contractor, as appropriate, shall require of the Architect, Architect's consultants, separate contractors described in Article 6, if any, and the subcontractors, sub-subcontractors, agents and employees of any of them, by appropriate agreements, written where legally required for validity, similar waivers each in favor of other parties enumerated herein. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

§ 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 If required in writing by a party in interest, the Owner as fiduciary shall, upon occurrence of an insured loss, give bond for proper performance of the Owner's duties. The cost of required bonds shall be charged against proceeds received as fiduciary. The Owner shall deposit in a separate account proceeds so received, which the

Owner shall distribute in accordance with such agreement as the parties in interest may reach, or as determined in accordance with the method of binding dispute resolution selected in the Agreement between the Owner and Contractor. If after such loss no other special agreement is made and unless the Owner terminates the Contract for convenience, replacement of damaged property shall be performed by the Contractor after notification of a Change in the Work in accordance with Article 7.

§ 11.3.10 The Owner as fiduciary shall have power to adjust and settle a loss with insurers unless one of the parties in interest shall object in writing within five days after occurrence of loss to the Owner's exercise of this power; if such objection is made, the dispute shall be resolved in the manner selected by the Owner and Contractor as the method of binding dispute resolution in the Agreement. If the Owner and Contractor have selected arbitration as the method of binding dispute resolution, the Owner as fiduciary shall make settlement with insurers or, in the case of a dispute over distribution of insurance proceeds, in accordance with the directions of the arbitrators.

§ 11.4 PERFORMANCE BOND AND PAYMENT BOND

§ 11.4.1 The Owner shall have the right to require the Contractor to furnish bonds covering faithful performance of the Contract and payment of obligations arising thereunder as stipulated in bidding requirements or specifically required in the Contract Documents on the date of execution of the Contract.

§ 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.

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 Architect's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by the Architect, be uncovered for the Architect's examination and be replaced at the Contractor's expense without change in the Contract Time.

§ 12.1.2 If a portion of the Work has been covered that the Architect has not specifically requested to examine prior to its being covered, the Architect may request 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. 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 a separate contractor in which event the Owner 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 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 Architect's services and expenses made necessary thereby, shall be at the Contractor's expense.

§ 12.2.2 AFTER SUBSTANTIAL COMPLETION

§ 12.2.2.1 In addition to the Contractor's obligations under Section 3.5, if, within one year after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Section 9.9.1, or by terms of 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 to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the one-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner or Architect, the Owner may correct it in accordance with Section 2.4.

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

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

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

§ 12.2.4 The Contractor shall bear the cost of correcting destroyed or damaged construction, whether completed or partially completed, of the Owner or separate 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.

§ 12.3 ACCEPTANCE OF NONCONFORMING WORK

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

ARTICLE 13 MISCELLANEOUS PROVISIONS

§ 13.1 GOVERNING LAW

The Contract shall be governed by the law of the place where the Project is located except that, if the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern Section 15.4.

§ 13.2 SUCCESSORS AND ASSIGNS

§ 13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns and legal representatives to covenants, agreements and obligations contained in the Contract Documents. Except as provided in Section 13.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make 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 courier service providing proof of delivery to, the last business address known to the party giving notice.

§ 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, 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 there under, except as may be specifically agreed in writing.

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§ 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 Architect timely notice of when and where tests and inspections are to be made so that the 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 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 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 Architect of when and where tests and inspections are to be made so that the 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, all costs made necessary by such failure including those of repeated procedures and compensation for the 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 Architect.

§ 13.5.5 If the Architect is to observe tests, inspections or approvals required by the Contract Documents, the 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 unreasonable 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 and Contractor shall commence all claims and causes of action, whether in contract, tort, breach of warranty or otherwise, against the other arising out of or related to the Contract in accordance with the requirements of the final dispute resolution method selected in the Agreement within the time period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and Contractor waive all claims and causes of action not commenced in accordance with this Section 13.7.

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 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 Architect has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Section 9.4.1, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents; or
- .4 The Owner has failed to furnish to the Contractor 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 and Architect, terminate the Contract and recover from the Owner payment for Work executed, including reasonable overhead and profit, costs incurred by reason of such termination, and damages.

§ 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 and the Architect, terminate the Contract and recover from the Owner as provided in Section 14.1.3.

§ 14.2 TERMINATION BY THE OWNER FOR CAUSE

§ 14.2.1 The Owner may terminate the Contract if the Contractor

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

§ 14.2.2 When any of the above reasons exist, the Owner, 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, seven days' written notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

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

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

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

§ 14.3 SUSPENSION BY THE OWNER FOR CONVENIENCE

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

§ 14.3.2 The Contract Sum and Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay or interruption 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 the Contract.

§ 14.4 TERMINATION BY THE OWNER FOR CONVENIENCE

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

§ 14.4.2 Upon receipt of 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, along with reasonable overhead and profit on the Work not executed.

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. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim.

§ 15.1.2 NOTICE OF CLAIMS

Claims by either the Owner or Contractor must be initiated by written notice to the other party and to the Initial Decision Maker with a copy sent to the Architect, if the Architect is not serving as the Initial Decision Maker. Claims by either party must be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later.

§ 15.1.3 CONTINUING CONTRACT PERFORMANCE

Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents. The Architect will prepare Change Orders and issue Certificates 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. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4.

§ 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, written notice as provided herein shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay, only one Claim is necessary.

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

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

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 14. Nothing contained in this Section 15.1.6 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 decision. The Architect will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to mediation of any Claim 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 decision having been rendered. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

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

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

§ 15.2.4 If the Initial Decision Maker requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of 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 either reject or approve the Claim in whole or in part.

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

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

§ 15.2.6.1 Either party may, within 30 days from the date of an initial decision, demand in writing that the other party file for mediation within 60 days of the initial decision. If such a demand is made and the party receiving the demand fails to file for mediation within the time required, then both parties waive their rights to mediate or pursue binding dispute resolution proceedings with respect to the initial decision.

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

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

§ 15.3 MEDIATION

§ 15.3.1 Claims, disputes, or other matters in controversy arising out of or related to the Contract except those waived as provided for in Sections 9.10.4, 9.10.5, and 15.1.6 shall be subject to mediation as a condition precedent to binding dispute resolution.

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

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

§ 15.4 ARBITRATION

§ 15.4.1 If the parties have selected arbitration as the method for binding dispute resolution in the Agreement, any Claim subject to, but not resolved by, mediation shall be subject to arbitration which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules in effect on the date of the Agreement. A demand for arbitration shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the arbitration. The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded.

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

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

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

§ 15.4.4 CONSOLIDATION OR JOINDER

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

§ 15.4.4.2 Either party, 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, provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an

additional person or entity shall not constitute consent to arbitration of any claim, dispute or other matter in question not described in the written consent.

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

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SUPPLEMENTAL GENERAL CONDITIONS

1. COPIES OF DOCUMENTS:

Contract Documents may be purchased as directed in the "Notice to Bidders".

2. BONDS AND INSURANCE:

- A. The Contractor shall not commence work under this contract until he has obtained all insurance required by these specifications and until such insurance has been approved by the Owner, nor shall the Contractor allow any Subcontractor to commence work on his subcontract until all similar insurance required of the Subcontractor has been obtained and approved. Policies expiring on a fixed date before final acceptance of the project must be renewed and evidence of such renewal submitted to the Owner before such date.
- B. The Contractor shall furnish the Owner with satisfactory evidence of the insurance required.
- C. The Owner will obtain the "Builders Risk Insurance" coverage for the entire project. Contractor shall be responsible to pay policy deductible amount if there is a claim caused by the Contractor's or any Sub Contractors negligence.
- D. All policies and/or policy certificates shall contain the following clauses:
 - 1. Worker's Compensation Insurance: The Contractor shall maintain during the life of this contract Worker's Compensation Insurance for all his employees employed at the site of the project, and, in case any work is sublet, the Contractor must require the Subcontractor similarly to provide Worker's Compensation Insurance for all of his employees engaged in work under this contract at the site of the project. The Contractor shall provide insurance coverage equal to that provided under the Worker's Compensation Act, for the protection of his employees not otherwise protected. Employers liability coverage must be maintained in amounts not less than 100,000/500,000/100,000.
 - 2. Public Liability Property Damage: The Contractor shall maintain during the life of this contract Commercial General Liability Insurance. Such coverage shall protect him and any Subcontractor performing work covered by this contract, from claims for damages for personal injury, including accidental death, as well as from claims for property damages, which may arise from operations under this contract, whether such operations be by himself or by any Subcontractor or by anyone directly or indirectly employed by either of them and the amounts of such insurance shall be as follows:

Commercial General Liability insurance in an amount not less than \$1,000,000 per occurrence for Bodily Injury, Property Damage, Personal and Advertising Injury with a \$1,000,000 general aggregate and a \$1,000,000 Products and Completed Operations aggregate.

The Contractor shall require all of its Subcontractors, if not protected under Contractor's insurance policies, to effect and maintain, at their own expense during the entire period of performance and until completion of the subcontract, Commercial General Liability Insurance with a company or companies to the satisfaction of the Owner, as follows:

- a. Commercial General Liability Insurance in an amount not less than \$1,000,000 per occurrence for Bodily Injury, Property Damage, or accidental death with a \$1,000,000 general aggregate and a \$1,000,000 Products and Completed Operations aggregate.
 - b. Special hazards not covered under the Commercial General Liability Insurance must be covered on a policy within the amounts as required above.
3. Business Auto Insurance: The Contractor and all Subcontractors shall at all times during the life of this contract, and any other subcontracts, maintain at their own expense, respectively, business auto insurance covering all liability and claims arising from the use and operation, anywhere in the United States, in connection with the performance of the Contract of Subcontracts of automobiles, whether such are owner, hired, or non-owned by the Contractor or Subcontractors. Such auto insurance shall be written with a limit of not less than \$1,000,000 per occurrence as a combined single limit for Bodily Injury and Property Damage coverage.
4. Umbrella Liability: The Contractor and all Subcontractors shall maintain during the life of this contract, Umbrella Liability Insurance providing excess coverage over the above specified primary insurance in an amount not less than:
- a. \$1,000,000 for contracts UNDER \$100,000.00.
 - b. \$2,000,000 for contracts OVER \$100,000.00.
5. Additional Insurance Requirements: The Contractor and all Subcontractors in connection with the above mentioned Worker's Compensation Insurance shall furnish to the Owner a duly executed certificate of compliance, as prescribed by the Indiana Worker's Compensation Board showing that such insurance is in full force and effect.

With regard to the above mentioned General Liability Insurance, if in the event of any major change or cancellation of such policy, the Contractor and all Subcontractors shall give 30-day advance notice to the Owner.

Also, the Contractor and all Sub-contractors shall make the Owner, as stated in the "Instructions to Bidders", additional insured on their Business Auto and General Liability policies with regard to this Contract.

The Contractor and all Subcontractors shall be required to furnish to the Owner duly executed certificates of insurance showing that all insurance policies required under this contract have been issued and are in full force and effect at all times during the life of this contract and have named the Owner, as stated in the "Instructions to bidders", additional Insured. These certificates are to include General Liability, including contractual coverage, Business Auto and Umbrella Liability.

The “Contractor” will name the “Owner”, and any other parties specified, as an “Additional Insured” under the Commercial General Liability Policy. This “Additional Insured” coverage shall be on Form CG2010, or its equivalent, including “completed operations” coverage. The “Additional Insured” coverage provided to the Owner shall be primary coverage, and non-contributory as respects the Owners Liability policy.

6. Loss or Damage: The Owner will obtain all Builders Risk Insurance Policies for this Project.
7. Indemnification: To the fullest extent permitted by law, the Subcontractor expressly agrees to defend (at Subcontractor’s expense and with counsel acceptable to the Contractor), indemnify, and hold harmless Owner, Contractor, Architect, Architect’s Consultants, Engineer, Construction Manager, Lender, and any other parties which Contractor has agreed to indemnify as named or referenced in the project contract documents as attached to and made a part of this Subcontract, and their respective Officers, Directors, Shareholders, Employees, Agents, Successors, Affiliates, and Assigns from and against any and all claims, suits, losses, causes of action, damages, liabilities, fines, penalties and expenses of an kind whatsoever, including without limitation arbitration or court costs and attorney’s fees, arising on account of or in connection with injuries to or the death of any person, or any and all damages to property including loss of use, from or in any manner connected with the work performed by or for the Subcontractor under this Subcontract, caused in whole or in part by the presence of the person or property or the negligent acts or omissions of the Subcontractor or any of its Employees, Agents, Representatives, Sub-Subcontractors, or suppliers or anyone for whose acts they may be liable, including without limitation such claims, damage, loss of expense caused in part by the negligent acts or omissions of a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Paragraph.
The defense and Indemnification obligations under this Subcontract agreement shall not be restricted in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the Subcontractor under workers’ compensation acts, disability benefits acts, or other employee benefits acts, and shall extend to and include any actions brought by or in the name of any employee of the Subcontractor or any third party to whom Subcontractor may subcontract a part or all of the work.

SUBCONTRACTORS:

- A. Prior to the awarding of the Contract, the contractor shall submit to the Owner, in writing, the names of the proposed Subcontractors and major material vendors. The Contractor shall furnish the Owner with full information concerning the proposed Subcontractor's ability and qualifications at the time such Subcontractor is submitted for approval.
- B. The Contractor shall be responsible for the acts and omissions of his Subcontractors and of persons either directly or indirectly employed by them as he is for the acts and omissions of persons directly employed by him.
- C. Nothing contained in the Contract shall create any contractual relationship between any Subcontractor and the Owner, and no Subcontractor will be recognized as a party to the Contract.

3. TAXES:

The Contractor shall pay all unemployment, social security, and other such taxes imposed by local, state, or federal government.

The Owner is **not** subject to Indiana Retail Sales Tax and Federal Excise Tax, these taxes should **not** be included in the Contractor's bid.

4. SAFETY AND PROTECTION:

OCCUPATIONAL SAFETY AND HEALTH ACTS:

These construction documents, and the joint and several phases of construction hereby contemplated are to be governed at all times by the applicable provisions of the state and federal laws included, but not limited to, the latest amendments of the following:

- 1. Indiana Occupational Safety and Health Act.
- 2. Williams-Steiger Occupational Safety and Health Act of 1970 Public Law 81-596; Part 1910-Occupational Safety and Health Standards, Chapter XVII of Title 29, Code of Federal Regulations; Part 1518-Safety and Health Regulations for Construction, Chapter XIII of Title 29, Code of Federal Regulations.
- 3. The REMOVAL of all asbestos associated with this project shall be in conformance with all Governing Codes for removal.

The Contractor shall assume full responsibility for health and safety at the construction site, including, but not limited to, the above mentioned laws and regulations.

5. PAYMENTS TO CONTRACTOR AND COMPLETION:

Progress payments will be made monthly based on an approved Application for Payment, and will include work completed, as well as payment on material and equipment delivered and suitably stored at the site, less retainage of 10% of the amount of each, less the aggregate of previous payments in each case. Contractor must include with application, proof of purchase and delivery of materials and equipment stored.

Applications for Payment shall be submitted using AIA G702/G703 documents.

Each Application for Payment shall be submitted with a "Affidavit and Waiver of Lien".

6. SHOP DRAWINGS AND SAMPLES:

See Section 01300 Submittals and Section 01340 Shop Drawings, Product Data, & Samples for information on these items.

No material shall be delivered to the project until final approved shop drawings are in the hands of the Owner and Engineer and no shop drawings shall be used on the project that do not bear the Engineer's stamp of approval.

7. EQUAL EMPLOYMENT OPPORTUNITY:

Attention of Bidders is particularly called to the requirement for ensuring that employees and applicants for employment are not discriminated against because of their race, creed, color, sex or national origin.

Attention of Bidders is also particularly called to the requirements for ensuring that, to the greatest extent feasible, in connection with work covered by this contract, opportunities for training and employment be made available to lower income residents of the project area and that contract work shall be awarded to business concerns which are located in or owned substantially by residents of the Project Area.

8. SCHEDULE OF VALUES:

Add into the submitted Schedules of Values for approval a line item for "Punchlist Completion" worth 0.5% of the amount of the contract and a line item for "Close Out Documentation" worth 0.5% of the amount of the contract.

9. MARK UP PRECENTAGES FOR SELF-PERFORMED:

General Contractor - 10% markup for labor, materials, and equipment for the work performed by the General Contractor and 5% markup for labor, material, and equipment for work performed by a subcontractor.

Subcontractors - 10% markup for labor, materials, and equipment for self- performed work and 5% markup of labor, material, and equipment for a second tier subcontractor's labor, materials, and equipment.

SECTION 01000 - GOVERNING CODES

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 SCOPE

The work on this project is to comply with all of the governing codes stated herein.

1.2 GOVERNING CODES

1. All work shall be performed in accordance with the 2012 International Building Code as adopted by the State of Indiana and called the 2014 Indiana Building Code.
2. Additional codes adopted with amendments are the following:
 - A. 2008 National Electrical Code as adopted by the State of Indiana and called the 2009 Indiana Electrical Code.
 - B. 2012 International Mechanical Code as adopted by the State of Indiana and called the 2014 Indiana Mechanical Code.
 - C. 2006 International Plumbing Code as adopted by the State of Indiana and called the 2012 Indiana Plumbing Code.
 - D. 2012 International Fire Code as adopted by the State of Indiana and called the 2014 Indiana Fire Code.
 - E. ASHRAE 90.1-2007 as adopted by the State of Indiana and called the 2010 Indiana Energy Conservation Code.
3. All work shall also be performed according to any city and county regulations or codes.
4. All trenching and excavations shall be properly designed by the Excavator in accordance with OSHA and IOSHA excavation regulations.
5. Job safety shall be adhered to by all Contractors on the project in accordance with OSHA and all governing bodies.

PART 2: PRODUCTS (Not Applicable)

PART 3: EXECUTION (Not Applicable)

END OF SECTION

SECTION 01005 - SUMMARY, ALLOWANCES, AND ALTERNATES

PART 1-GENERAL

1.1 RELATED DOCUMENTS

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

1.2 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Project consists of the building renovations located at the existing site owned by:
Indiana Laborers' Training Trust Fund
439 Patton Hill Road
Bedford, Indiana 47421

Project Location:
Indiana Laborers' Training Trust Fund
439 Patton Hill Road
Bedford, Indiana 47421

- B. Contract documents dated April 22, 2019 were prepared by:

Michael R. Waldbieser
Engineering & Consulting, Inc.
19 South 6th Street, Suite 804
Terre Haute, Indiana 47807

- C. The Work includes all labor, material, equipment, tools, and services required for the building renovations on 439 Patton Hill Road as defined by the Contract Documents. A listing of the major products and systems included in the Work is indicated by the Index in the Project Manual.
- D. The Work will be completed under a single prime contract.

1.3 COORDINATION

- A. General: The Contract includes coordination of entire work of project including preparation of general coordination drawings/diagrams/schedules, and control of site utilization; from the beginning of activity, through the project close-out and warranty periods.
- B. The Owner will be occupying other portions of the building during construction. The contractor shall coordinate his activities during the term of the contract so as not to inconvenience the Owner and his operations any more than is necessary.

1.4 ALTERNATES

- A. Definitions: Alternates are defined as alternate products, materials, equipment or systems for the work, which may, at Owner's option and under terms established by Instructions to Bidders, be selected and recorded in (Owner-Contractor Agreement) to either supplement or displace corresponding basic requirements of contract documents. Alternates may or may not substantially change scope and general character of the work; and must not be confused with "allowances", "unit prices", "change orders", "substitutions", and other similar provisions.
- B. General Provisions: A "Schedule of Alternates" is included at end of this section. Each alternate is defined by abbreviated language, recognizing that drawings and specification sections document the requirements. Coordination of related work is required to ensure that work effected by each selected alternate is complete and properly interfaced with work of alternates.

1.5 ALLOWANCES

- A. General: A "Schedule of Allowances", showing amounts included in each prime Contract Sum, is included at end of this section. Coordinate allowance work with related work, to ensure that each selection is completely integrated and interfaced with related work. Requirements for work of allowance are shown and specified to extent established by date of contract documents; additional requirements are established by change order. At earliest possible date, advise Architect/Engineer of date each final allowance selection must be completed. Submit proposals for allowance work as directed, and in a manner specified for change orders. Indicate quantities, unit costs, total purchase amounts, taxes, delivery charges and trade discounts. Where requested, furnish detailed breakdown of quantity survey. Contractor mark-up on overrun of allowance purchases will be permitted where purchase amount exceeds established allowance by more than 15%; otherwise, and except as otherwise indicated, amount of change order on each allowance will be difference between purchase amount and allowance. Deliver excess materials of allowance work to Owner's storage space, or dispose of by other means as directed.
- B. Unit-Cost Allowances: Change Order amount will be difference between unit purchase amount and unit-cost allowance, multiplied by final measure or count of work-in-place, including reasonable margins for applicable cutting losses, tolerances, mixing wastes, product imperfections and similar margins. Owner reserves right to establish final measure or count of work-in-place by independent quantity surveyor.

1.6 CUTTING AND PATCHING

- A. Definition: Includes cutting and patching of both previously existing work and nominally completed portions of Contract work. Excludes shop fabrication of work, and normal installation procedures including the drilling of holes to install fasteners. Excludes special categories, grading, planting, cleaning, removal/replacement of noncomplying work and similar activities; although some of these activities may require cutting and patching.
- B. General: Specific requirements and limitations for cutting and patching are shown and specified for certain types of work, and specified in other sections of Division I as required quality control procedures for general application to performance of the work.

1.7 PERFORMANCE REQUIREMENTS FOR COMPLETED WORK

- A. General: The contract documents indicate intended occupancy and utilization of building or site and its individual systems and facilities. Compliance with governing regulations is intended and required, for the work and for Owner's occupancy and utilization.

1.8 DISPOSAL OF WASTE MATERIAL

- A. All waste material and debris resulting from Work of this Contract shall be removed from the site by Contractor and disposed of in a legal manner.

1.9 SCHEDULING/LIQUIDATED DAMAGES

- A. Construction shall commence within 10 calendar days of Notice to Proceed, and be completed within the time frame agreed upon by the Owner.
- B. No liquidated damages on this project.

1.10 SCHEDULE OF ALTERNATES

- A. Alternate #1 – Paint existing corridors in the dormitory of section of the building. Typical of 3 Floors. Do not paint existing HM Steel door frames.
- B. Alternate #2 – Provide and install sink base vanity and top in 30 dormitory restrooms.
- C. Alternate #3 – Provide and install VCT instead of Sheet Vinyl flooring in 30 dormitory restrooms.

1.11 SCHEDULE OF ALLOWANCES

- A. Section 09400 - Sheet Vinyl Flooring

END OF SECTION

SECTION 01010 - SUMMARY OF WORK

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 WORK AND DEFINITION OF PARTIES

A. The work described herein and illustrated on the accompanying drawings is to comprise all materials and labor for the General Construction and Demolition work as shown on the drawings and specified herein for this project.

B. Wherever the word "Owner" is used herein, it refers to:

Indiana Laborers' Training Trust Fund
439 Patton Hill Road
Bedford, Indiana 47421

C. Wherever the word "Engineer" is used herein, it refers to Michael R. Waldbieser Engineering & Consulting, Inc., 19 South 6th Street, Suite 804, Terre Haute, Indiana 47807.

D. Wherever the word "Contractor" is used herein, it refers to the Contractor or Contractors for any part or parts of the work covered by these specifications and the accompanying drawings. The work will be completed under separate prime contracts as directed by the Owner.

1.2 SCOPE OF GENERAL CONDITIONS AND ALL CONTRACT DOCUMENTS

A. The General Conditions and all contract Documents shall govern in any subcontract made for any part or parts of the General Construction and Demolition work in this project.

1.3 COORDINATION

A. General: The Contract includes coordination of entire work of project including preparation of general coordination drawings/diagrams/schedules, and control of site utilization; from the beginning of activity, through the project close-out and warranty periods.

1.4 DUPLICATING

A. It is understood that work not indicated on a part of the drawings but reasonably implied to be similar to that shown at corresponding places on other drawings, is to be repeated.

1.5 CUTTING, PATCHING AND DIGGING

A. Each Prime Contractor shall do all cutting, fittings, or patching of his work that may be required to make its several parts come together properly and fit to work with other Contractors, as shown or reasonably implied by the drawings and specifications, or as the Engineer and Owner may direct.

B. Any cost of defective or ill-time work shall be borne by the party responsible therefore.

- C. Contractor shall not endanger any work cutting, digging, or otherwise and shall not cut or alter the work of any Contractor except with the consent of the Engineer and Owner.

1.6 DIVISION OF WORK

- A. All mechanical, ventilating, electrical "rough-in", and final connection for equipment, shall be done by the respective Contractor for that work from drawings furnished, unless otherwise specifically noted.

1.7 VERIFYING MEASUREMENTS

- A. The Contractor shall verify all measurements and be responsible for mistakes he may make and their result. If the Contractor discovers any discrepancy, in figures on the drawings, he shall report same to the Engineer before proceeding with any work affected by the discrepancy, and shall be held responsible for results should he fail to make such report.

1.8 PERFORMANCE REQUIREMENTS FOR COMPLETED WORK

- A. General: The contract documents indicate intended occupancy and utilization of building or site and its individual systems and facilities. Compliance with governing regulations is intended and required, for the work and for Owner's occupancy and utilization.

1.9 DISPOSAL OF WASTE MATERIAL

- A. All waste material and debris resulting from Work of this Contract shall be removed from the site by Contractor and disposed of in a legal manner.

1.10 SCHEDULING/LIQUIDATED DAMAGES

- A. Construction shall commence within the time frame presented by the Owner.

1.11 WORK IN THIS CONTRACT

- A. It is the intent of this Section to outline the main work items included in this Contract, not all work items, so the Contractor can have an overview of the scope of the project.
- B. Renovation of the existing building as shown on the drawings.

1.12 DEMOLITION

- A. All demolition work shall be done in a workman like manner in order cause no more disturbance to operations than absolutely necessary. Coordinate demolition with the Contact.
- B. All debris to be removed from site by contractor except for those items stated on the drawings which are to be removed and taken to a designated area for storage and remain the property of the owner.
- C. Refer to "Instructions to Bidders" for additional information.

PART 2: PRODUCTS (Not Applicable)

PART 3: EXECUTION (Not Applicable)

END OF SECTION

SECTION 01030 - ALLOWANCES

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 SCOPE

- A. Include in the Contract Sum all allowances stated in the Contract Documents.

1.2 ALLOWANCES FOR PRODUCTS

- A. The amount of each allowance includes:
 - 1. The cost of the product to the Contractor, less any applicable trade discounts.
 - 2. Labor required under the allowance, only when labor is specified to be included in the allowance.
- B. In addition to the amount of each allowance, include in the Contract Sum the Contractor's cost for:
 - 1. Delivery to the site, if freight is not included in the allowance.
 - 2. Handling at the site; including unloading, uncrating, and storage.
 - 3. Protection from the elements and from damage.
 - 4. Labor for installation and finishing, except where labor is specified to be a part of the allowance.
 - 5. Applicable taxes, if taxes are not included in allowance.
 - 6. Other expenses required to complete the installation.
 - 7. Contractor's and sub-contractor's overhead and profit.
- C. If taxes and freight are included in an allowance, it will be so stated.

1.3 SECTION 09400 – SHEET VINYL FLOORING

- A. The Contractor shall include in his bid an allowance of \$6.00 / sf for sheet vinyl, installed. Should work selected cost more than \$6.00 / sf, the difference between this amount and the actual cost of the work selected will be added to the Contractor's price of the work. Should the work selected cost less than \$6.00 / sf, the difference between this amount and the actual cost of the work selected will be deducted from the Contractor's price for the work. No percentage will be added or deducted on account of the difference in the cost of the work. No increase in the Contractors overhead or profit will be allowed regardless of the amount spent on this section of work.
Allowance figure above does not include the cost to supply and install 4” vinyl base.

1.4 SELECTION OF PRODUCTS UNDER ALLOWANCES

A. Engineers Duties:

1. Make selection in consultation with Owner.
2. Transmit Owner's decision to the Contractor.

B. Contractor's Duties.

1. Obtain proposals from supplier and installers.
2. Notify the Engineer of any effect on the Construction Schedule anticipated by selections under consideration.
3. Submit copies of invoices from sub-contractors on all allowance items with payment requests. At that time change orders will then be issued if required.
No payment on allowance items will be made without copies of invoices submitted with payment requests.

1.5 CONTRACTOR RESPONSIBILITY FOR PURCHASE, DELIVERY AND INSTALLATION

- A. On notification of selection, execute purchase agreement with designated supplier.
- B. Make arrangements for delivery.
- C. Upon delivery, promptly inspect products for damage or defects.
- D. Submit claims for transportation damage.

END OF SECTION

SECTION 01068 - REFERENCE STANDARDS AND DEFINITIONS

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 RELATED DOCUMENTS

- A. General: Basic Contract definitions are included in the General and Supplementary Conditions and other Division I Specification sections; apply to work of this section.

1.2 DEFINITIONS

- A. General: Basic Contract definitions are included in the General Conditions.
- B. Indicated: The term "indicated" refers to graphic representatives, notes, or schedules on the Drawings, other Paragraphs of Schedules in the Specifications, and similar requirements in the Contract Documents. Where terms such as "shown", "noted", "scheduled" are used, it is to help the reader locate the reference; no limitation on location is intended.
- C. Directed: Terms such as "directed", "requested", "authorized", "selected", "approved", "required", and "permitted", mean "directed by the Engineer", "requested by the Engineer", and similar phrases.
- D. Approved: The term "approved", where used in conjunction with the Engineer's action on the Contractor's submittals, applications, and requests, is limited to the Engineer's duties and responsibilities as stated in the Conditions of the Contract.
- E. Or an Approved Equal: The phrase "or an approved equal" means a product or material for which a request for approval was made and for which the Engineer's approval was granted prior to receipt of bids.
- F. Regulations: The term "Regulations" includes laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the Work.
- G. Furnish: The term "furnish" is used to mean "supply and deliver to the Project site, ready for unloading, unpacking, assembly, installation, and similar operations."
- H. Install: The term "install" is used to describe operations at project site including the actual "unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations."
- I. Provide: The term "provide" means "to furnish and install, complete and ready for intended use."
- J. Installer: An "Installer" is the Contractor or an entity engaged by the Contractor, either as an employee, subcontractor, or contractor of lower tier for performance of a particular construction activity, including installation, erection, application, and similar operations. Installers are required to be experienced in the operations they are engaged to perform.

1. The term "experienced" when used with the term "Installer" means having a minimum of five previous project similar in size and scope to this project, being familiar with the special requirements indicated, and having complied with requirements of the authority having jurisdiction.
 2. Trades: Use of titles such as "carpentry" is not intended to imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to tradespersons of the corresponding generic name.
 3. Assignment of Specialist: Certain Sections of the Specifications require that specific construction activities shall be performed by specialists who are recognized experts in the operations to be performed. The specialists must be engaged for those activities, and assignments are requirements over which the Contractor has no choice or option. Nevertheless, the ultimate responsibility for fulfilling Contract requirements remains with the Contractor.
 - a. This requirement shall not be interpreted to conflict with enforcement of building codes and similar regulations governing the work. It is also not intended to interfere with local trade union jurisdiction settlements and similar conventions.
- K. Project Site is the space available to the Contractor for performance of construction activities, either exclusively or in conjunction with others performing other work as part of the project. The extent of the Project Site is shown on the Drawings and may or may not be identical with the description of the land upon which the project is to be built.
- L. Testing Laboratories: A "testing laboratory" is an independent entity engaged to perform specific inspections or tests, whether at the Project Site or elsewhere, and to report on and, if required, to interpret results of those inspections or tests.

1.3 SPECIFICATION FORMAT AND CONTENT EXPLANATION

- A. Specification Format: These Specifications are organized into Divisions and Sections based on the Construction Specifications Institute's 16-Division Format and MASTERFORMAT numbering system.
1. Abbreviated Language: Language used in Specifications and other Contract Documents is the abbreviated type. Words that are implied, but not stated shall be interpolated as the sense required. Singular words interpreted as singular where applicable and the content of the Contract Documents so indicates.
 2. Imperative and streamlined language is used generally in the Specifications. Requirements expressed in the imperative mood are to be performed by the Contractor. At certain locations in the text, for clarity, subjective language is used to describe responsibilities that must be fulfilled indirectly by the Contractor, or by others when so noted.
 - a. The words "shall be" shall be included by inference wherever a colon (:) is used within a sentence or phrase.

1.4 INDUSTRY STANDARDS

- A. Applicability of Standards: Except where the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents. Such standards are made a part of the Contract Documents by reference.
- B. Publication Dates: Comply with the standard in effect as of the date of the Contract Documents.
- C. Conflicting Requirements: Where compliance with two or more standards is specified, and the standards may establish different or conflicting requirements for minimum quantities or quality levels, refer requirements that are different, but apparently equal, and uncertainties to the Engineer for a decision before proceeding.
 - 1. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. In complying with these requirements, indicated numeric values are minimum or maximum, as appropriate for the content of the requirements. Refer uncertainties to the Engineer for a decision before proceeding.
- D. Copies of Standards: Each entity engaged in construction on the project is required to be familiar with industry standards applicable to that entity's construction activity. Copies of applicable standards are not bound with the Contract Documents.
 - 1. Where copies of standards are needed for performance of a required construction activity, the Contractor shall obtain copies directly from the publication source.
- E. Abbreviations and Names: Trade association names and titles of general standards are frequently abbreviated. Where such acronyms or abbreviations are used in the Specifications or other Contract Documents, they mean the recognized name of the trade association, standards generating organization, authority having jurisdiction, or other entity applicable to the context of the text provision. Refer to the "Encyclopedia of Associations," published by Gale Research Co., available in most libraries.

1.5 GOVERNING REGULATIONS/AUTHORITIES

- A. The Engineer has contacted authorities having jurisdiction where necessary to obtain information necessary for preparation of Contract Documents. Contact authorities having jurisdiction directly for information and decisions having a bearing on the work.

1.6 SUBMITTALS

- A. Permits, Licenses, and Certificates: For the Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, and similar documents, correspondence, and records established in conjunction with compliance with standards and regulations bearing upon performance of the work.

PART 2: PRODUCTS (Not Applicable)

PART 3: EXECUTION (Not Applicable)

END OF SECTION

SECTION 01300 - SUBMITTALS

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division I Specification sections, apply to work of this section.

1.2 DESCRIPTION OF REQUIREMENTS

- A. The types of submittal requirements specified in this section include shop drawings, product data, samples and miscellaneous work-related submittals. Individual submittal requirements are specified in applicable sections for each unit of work. Refer to other Division I sections and other contract documents for requirements of administrative submittals.
- B. Definitions: Work-related submittals of this section are categorized for convenience as follows:
 - 1.Shop drawings include specially-prepared technical data for this project, including drawings, diagrams, performance curves, data sheets, schedules, templates, patterns, reports, calculations, instructions, measurements and similar information not in standard printed form for general application to a range of similar projects.
 - 2.Product data include standard printed information on materials, products and systems; not specially-prepared for this project, other than the designation of selections from among available choices printed herein.
 - 3.Samples include both fabricated and unfabricated physical examples of materials, products and units of work; both as complete units and as smaller portions of units of work; either for limited visual inspection or (where indicated) for more detailed testing and analysis.
 - 4.Mock-ups are a special form of samples, which are too large or otherwise inconvenient for handling in specified manner for transmittal of sample submittals.
 - 5.Miscellaneous submittals related directly to the work (non-administrative) include warranties, maintenance agreements, workmanship bonds, project photographs, survey data and reports, physical work records, quality testing and certifying reports, copies of industry standards, record drawings, field measurement data, operating and maintenance materials, overrun stock, and similar information, devices and materials applicable to the work and not processed as shop drawings, product data or samples.

1.3 GENERAL SUBMITTAL REQUIREMENTS

- A. Timing of Submittals: All required submittals shall be made in a timely manner so that as not to delay the progress of the project, but in no case shall they be made more than 30 days after award of the contract.

- B. Preparation of Submittals: Provide permanent marking on each submittal to identify project, date, Contractor, subcontractor, submittal name and similar information to distinguish it from other submittals. Show Contractor's executed review and approval marking and provide space for Architect's/Engineer's "Action" marking. Package each submittal appropriately for transmittal and handling. Submittals which are received from sources other than through Contractor's office will be returned by A/E "without action".

Transmittal Form: Contractor's standard transmittal form.

Provide Contractor's certification on form, ready for execution, stating that information submitted complies with requirements of contract documents.

1.4 SPECIFIC-CATEGORY SUBMITTAL REQUIREMENTS

- A. General: Except as otherwise indicated in individual work sections, comply with requirements specified herein for each indicated category of submittal. Provide and process intermediate submittals, where required between initial and final, similar to initial submittals.
- B. Shop Drawings: Provide newly-prepared information, on reproducible sheets, with graphic information at accurate scale (except as otherwise indicated), with name of preparer indicated (firm name). Show dimensions and note which are based on field measurement. Identify materials and products in the work shown. Indicate compliance with standards, and special coordination requirements. Do not allow shop drawing copies without appropriate final "Action" markings by Engineer to be used in connection with the work.
 - 1. Initial Submittal: One correctable translucent reproducible print and one blueline or black-line print; reproducible will be returned.
- C. Product Data: Collect required data into one submittal for each unit of work or system; and mark each copy to show which choices and options are applicable to project. Include manufacturer's standard printed recommendations for application and use, compliance with standards, application of labels and seals, notation of field measurements which have been checked, and special coordination requirements. Maintain one set of product data (for each submittal) at project site, available for reference by Architect/Engineer and others.
 - 1. Submittals: Do not submit product data, or allow its use on the project, until compliance with requirements of contract documents has been confirmed by Contractor. Submittal is for information and record, unless otherwise indicated. Initial submittal is final submittal unless returned promptly by Architect/Engineer, marked with an "Action" which indicates an observed non compliance. Submit 5 copies, 3 copies will be returned for contractor's use and where required for maintenance manuals.
- D. Samples: Provide units identical with final condition of proposed materials or products for the work. Include "range" samples (not less than 3 units) where unavoidable variations must be expected, and describe or identify variations between units of each set. Provide full set of optional samples where Architect's/Engineers selection is required. Prepare samples to match Architect's/Engineer's sample where so indicated. Include information with each sample to show generic description, source or product

name and manufacturer, limitations, and compliance with standards. Samples are submitted for review and confirmation of color, pattern, texture and "kind" by Architect/Engineer. Architect/Engineer will not "test" samples (except as otherwise indicated) for compliance with other requirements, which are therefore the exclusive responsibility of Contractor.

1. Submittal: Provide submittal of 3 sets of samples for Architect's/Engineer's review and "Action". Two sets will be returned. Maintain one set of samples at the job site.
- E. Mock-Ups: Mock-ups and similar submittal of 3 sets of samples for Architect's/Engineer's review and "Action". Two sets will be returned. Maintain one set of samples at the job site.
- F. Inspection and Test Reports: Classify each as either "shop drawing" or "product data", depending upon whether report is uniquely prepared for project or a standard publication of workmanship control testing at point of production; process accordingly.
- G. Warranties: Refer to "Products" section for specific general requirements on warranties, product/workmanship bonds, and maintenance agreements. In addition to copies desired for Contractor's use, furnish 2 executed copies, except furnish 2 additional (conformed) copies where required for maintenance manuals. Refer to Mechanical and Electrical Sections.
- H. Closeout Submittals: Refer to individual work sections and to "closeout" sections for specific requirements on submittal of closeout information, materials, tools and similar items.

Record Document Copies: Furnish one set.

Maintenance/Operating Manuals: Furnish 2 bound copies.

1. Materials and Tools: Refer to individual work sections for required quantities of spare parts, extra and overrun stock, maintenance tools and devices, keys, and similar physical units to be submitted.
- I. General Distribution: Provide additional distribution of submittals (not included in foregoing copy submittal requirements) to subcontractors, suppliers, fabricators, installers, governing authorities and others as necessary for proper performance of the work. Include such additional copies in transmittal to Architect/Engineer where required to receive "Action" marking before final distribution. Record distributions on transmittal forms.

1.5 ACTION ON SUBMITTALS

- A. Except for submittals for the record or for information, where action and return of submittals is required, the Architect or Engineer will review each submittal, mark to indicate the action taken, and return.
 1. Do not permit submittals marked "Revise and resubmit" or "Rejected" to be used in the Work.

PART 2: PRODUCTS (Not Applicable)

PART 3: EXECUTION (Not Applicable)

END OF SECTION

SECTION 01310 - COORDINATION AND EXPEDITING

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 MEETINGS

It shall be an obligation of the Contractors to attend a meeting with the Owner and Engineer as directed by Engineer, during the entire life of the project for the purpose of expediting the work and considering other matters pertaining thereto. Notice of said meetings to originate in the office of the Engineer. Contractor to require his principal Subcontractors to attend.

1.2 PROGRESS SCHEDULE

After award of contract, prime contractors cooperatively shall submit for approval a progress schedule. This schedule shall be worked out and agreed upon by the prime contractors and is intended to act as a means of obtaining closer cooperation and coordination between all contractors involved. The schedule shall be based on work days. It should be remembered that time must be allotted for shop drawings and decisions involving Engineer and Owner.

PART 2: PRODUCTS (Not Applicable)

PART 3: EXECUTION (Not Applicable)

END OF SECTION

SECTION 01340 - SHOP DRAWINGS, PRODUCT DATA, & SAMPLES

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for submittal of Shop Drawings Product Data and Samples.

1.3 SUBMITTAL PROCEDURES

- A. Contractor Reviews: The Contractor shall review and approve all submittals before transmitting them to the Architect/Engineer. Each submittal shall bear the approval stamp of the Contractor or they will be returned by the Architect/Engineer unchecked.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal to the Architect/Engineer sufficiently in advance of scheduled performance of related construction activities to avoid delay. The Architect/Engineer will then review the submittals or send them on to the appropriate consulting Engineer for review.
 - 1. Processing: To avoid the need to delay installation as a result of the time required to process submittals, allow sufficient time for submittal review, including time for re-submittals
 - 2. Submit only the shop drawings, product data, and samples called for in the technical Sections. Any other shop drawings, product data, or samples submitted will be returned unchecked.
- C. Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal to the Architect/Engineer and to other destinations by use of a transmittal form. The Architect/Engineer will return submittals received from sources other than the Contractor.
 - 1. Record relevant information and requests for data on the transmittal form. On the form, or an attached separate sheet, record deviations from requirements of the Contract Documents, including minor variations and limitations.
 - 2. Include the Contractor's certification stating that information submitted complies with requirements of the Contract Documents.

1.4 SHOP DRAWINGS

- A. Submit newly prepared information, drawn accurately to scale. Do not reproduce Contract Documents or copy standard printed information as the basis of Shop Drawings.
 - 1. Include the following information on Shop Drawings:
 - a. Dimensions.
 - b. Identification of products and materials included.
 - c. Compliance with specified standards.
 - d. Notation of coordination requirements
 - e. Notation of dimensions established by field measurement.
 - 2. Submit Coordination Drawings where required for integration of different construction elements. Show construction sequences and relationships of separate components where necessary to avoid conflicts in utilization of the space available.
 - 3. Highlight, encircle, or otherwise indicate deviations from the Contract Documents on the Shop Drawings.
 - 4. Do not allow Shop Drawing copies that do not contain an appropriate final stamp or other marking indicating the action taken by the Architect or Engineer to be used in construction.
 - 5. Submittal: Submit 1 reproducible copy and 2 additional blue line or black line prints of each shop drawing. The 2 prints marked with the action taken by the Architect or Engineer will be retained and the reproducible copy will be returned to the Contractor. The Contractor should then make copies from the reproducible that bears the action stamp as suits his needs, including a copy required for Project Record Documents.

1.5 PRODUCT DATA

- A. Collect Product Data into a single submittal for each element of construction or system. Mark each copy to show which choices and options are applicable to the Project.
 - 1. Include the following information in Product Data:
 - a. Manufacturer's printed recommendations.
 - b. Compliance with recognized trade association standards.
 - c. Compliance with recognized testing agency standards.
 - d. Application of testing agency labels and seals.
 - e. Notation of dimensions verified by field measurement.
- B. Submittals: Submit 5 copies of each required Product Data submittal. Two copies marked with the action taken by the Architect or Engineer will be retained, and the balance will be returned to the Contractor.

1.6 SAMPLES

- A. Submit 12" x 12", fully fabricated Samples, cured and finished in the manner specified, and physically identical with the material or product proposed for use.
 - 1. Submit Samples for review of kind, color, pattern, and texture for a final check of these characteristics with other elements and for a comparison of these characteristics between the final submittal and the actual component as delivered and installed.
 - a. Where variation in color, pattern, texture, or other characteristic is inherent in the material or product represented by a Sample, submit at least 3 multiple units that show approximate limits of the variations.
- B. Submittals: Except for Samples intended to illustrate assembly details, workmanship, fabrication techniques, connections, operation, and other characteristics, submit 3 sets of Samples. One set will be returned marked with the action taken.

1.7 ARCHITECT'S/ENGINEER'S ACTION

- A. Except for submittals for the record or for information, where action and return of submittals is required. The Architect or Engineer will review each submittal, mark to indicate the action taken, and return.
 - 1. Do not permit submittals marked "Revise and resubmit" or "Rejected" to be used in the Work.

PART 2: PRODUCTS (Not Applicable)

PART 3: EXECUTION (Not Applicable)

END OF SECTION

SECTION 01500 - TEMPORARY FACILITIES AND PROTECTION

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 RELATED DOCUMENTS

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

1.2 DESCRIPTION OF REQUIREMENTS

- A. Definitions: Specific administrative and procedural minimum actions are specified in this section, as extension of provisions in General Conditions and other documents. These requirements have been included for special purposes as indicated. Nothing in this section is intended to limit types and amounts of temporary work required, and no omission from this section will be recognized as an indication by Architect or Engineer that such temporary activity is not required for successful completion of the work and compliance with requirements of contract documents. Provisions of this section are applicable to, but not by way of limitation, utility services, construction facilities, security/protection provisions, and support facilities.

1.3 QUALITY ASSURANCE

- A. General: In addition to compliance with governing regulations and rules/recommendations of franchised utility companies, comply with specific requirements indicated and with applicable local industry standards for construction work (published recommendations by local consensus "building councils").
- B. OSHA: Contractors shall comply with Williams-Steiger, Occupational Safety & Health Act of 1970, Part 1926 (Formerly 1518), Safety & Health Regulations for Construction, Subpart H1926.250 and as amended thereafter.

Comply with Subpart E, 1926.100 through 1926.107 (1518.100 through 1518.107) Subpart H, 1926.251 (1518.251), Subpart I 1926.300 through 1926.305 (1518.300 through 1518.305) Subpart L 1926.450 through 1926.452 (1518.450 through 1518.452) Subpart N 1926.550 through 1926.555 (1518.550 through 1518.555) Subpart O 1926.600 through 1926.606 (1518.600 through 1518.606) of Safety & Health Regulations.

1.4 JOB CONDITIONS

- A. Conditions of Use: Install, operate, maintain and protect temporary facilities in a manner and at locations which will be safe, non-hazardous, sanitary and protective of persons and property, and free of deleterious effects.
- B. Each Contractor shall supply all tools, machinery, centers, hoists, derricks, etc. as required for the complete and satisfactory execution of his work. Each contractor shall provide all guys and anchorage for such apparatus and structures and shall be responsible for any unsafe work in connection with the same.

1.5 TEMPORARY UTILITY SERVICES

- A. The types of services required include, but not by way of limitation, water, electrical power and telephone. Contact local utilities for required services during construction.
- B. Potable Water: Contractors may use current water supply system in the building at no cost to the Contractors.
- C. Temporary Power: Contractors may use current electrical system in the building at not cost the Contractor.
All tools, extension cords, and equipment provided by the General Contractor.
Each contractor and/or subcontractor shall furnish any necessary wiring and extension cords to reach from the nearest outlet to his point of operation.

If any contractor requires additional power for use of tools, it will be their responsibility to make these arrangements with the Electrical Contractor.

All elements of the temporary service shall conform to the regulations of the National Electric Code, the National Electric Safety Code and the Safety Code for the Construction Industry, and Part 1926 Safety & Health Regulations for Construction and as amended thereafter.

No permanent power from permanent sources shall be used without the Owner's written permission indicating the conditions whereby it may be used. Consideration will not be given for the use of lights, wiring devices, or other electric equipment until the building is in the finishing stages, or unless it is in the Owner's interests.

1.6 TEMPORARY CONSTRUCTION FACILITIES

- A. The types of temporary construction facilities required include, but not by way of limitation, water distribution, heat, ventilation, and electrical power distribution. Provide facilities reasonable required to perform construction operations properly and adequately.
- B. Lighting: Provide sufficient temporary lighting to ensure proper workmanship everywhere by combined use of daylight and portable plug-in task lighting. Provide general lighting with local switching which will enable energy conservation during periods varying activity (work-in-progress, traffic only, security check, lock-up, etc.).

1.7 SECURITY/PROTECTION PROVISIONS

- A. The types of temporary security and protection provisions required include, but not by way of limitation, fire protection, barricades, warning signs/lights, building enclosure/lockup, personnel security program (theft prevention), environmental protection, and similar provisions intended to minimize property losses, personal injuries and claims for damages at project site.
- B. Fire Extinguishers: Provide types, sizes, numbers and locations as would be reasonably effective in extinguishing fires during early stages, by personnel at project site. Provide Type A Extinguishers at locations of low-potential for either electrical or grease-oil-flammable liquids fires; provide Type ABC dry chemical extinguishers at other locations; comply with recommendations of NFPA No. 10. Post warning and quick instructions at each extinguisher location, and instruct personnel at project site, at time of their first arrival, on proper use of extinguishers

and other available facilities at project site.

- C. Non-Working Hours: All temporary facilities or equipment which would permit unauthorized persons access to the construction area, or building, or roof shall be removed from the site or shall be secured to be unusable during periods when work is not in progress.
- D. Protection of Work: The General Contractor shall well in advance of lathing, plastering, painting and finishing operations, provide cloth or plastic covered frames for window openings and hinged plywood or batten doors with locks to maintain temperatures necessary to perform the work.

The General Contractor shall provide protection against all kinds of weather so that the building and materials will not be damaged. During cold weather, he shall provide protection at door and window openings.

The work of any Contractor damaged because of failure of the General Contractor to provide the protection above required shall be removed and replaced with new work at the General Contractor's expense.

Each Contractor shall protect his excavations, trenches and structures from damage from rain water, ground water, backing-up of drains and sewers, and from all other water. Provide pumps, equipment and enclosures to provide protection for his own work.

- D. Protection of Work: The General Contractor shall well in advance of lathing, plastering, painting and finishing operations, provide cloth or plastic covered frames for window openings and hinged plywood or batten doors with locks to maintain temperatures necessary to perform the work.
- E. Temporary partitions, if required, will be complete by the Owner and coordinated with the Contractor.

1.8 TEMPORARY SUPPORT FACILITIES

- A. The types of temporary support facilities required include, but not by way of limitation, storage sheds, fabrication sheds first aid facilities, signs, clean-up facilities waste disposal service, rodent/pest control and similar miscellaneous general services, all as may be reasonably required for proficient performance of the work and accommodation of persons, at the site including Owner's and Architect's/Engineer's personnel. Discontinue and remove temporary support facilities, and make incidental similar use of permanent work of the project, only when and in manner authorized by Architect/Engineer; and, if not otherwise indicated, immediately before time of substantial completion. Locate temporary support facilities for convenience of users, and for minimum interference with construction activities.
- B. Contractor's Field Office: Contractor's temporary field office is not required. If one is provided, locate as directed by Owner.
 - 1. Contractor shall provide telephones for emergency calls by either providing an office equipped with a telephone or providing a mobile telephone.

- C. Temporary Sheds: Contractor shall provide any temporary sheds he needs for storage, fabrication and similar purposes. Locate as directed by Owner.
- D. Sanitary Facilities: Contractor shall provide toilets he needs for sanitation. (Single occupant self-contained chemical toilet units, properly vented and fully enclosed with fiber reinforced polyester shell or similar non-absorbent material.) Provide separate toilet facilities for male and female construction personnel when both sexes are employed on site.
- E. Cleaning and Trash Removal: Contractor shall provide waste containers sufficient for the deposit of non-hazardous/non-toxic waste materials. Remove such waste materials from the project site at least twice weekly during mild and warm weather (daily high temperatures above 50 degrees F). Remove not less than weekly during periods when daily high temperatures are at or below 50 degrees F.
- F. Temporary Walks, Stairs, Ladders, Ramps, and Runways: General Contractor shall furnish and maintain all equipment such as temporary stairs, ramps, chutes, etc. as required for proper execution of the work by all trades, except where specifically mentioned that above is to be furnished and maintained under divisions or sections of contract as hereinafter specified. All above shall comply with Subpart L, 1926.450 through 1926.452 (1518.450 through 1518.452) & Subpart M, 1926.500 through 1926.502 (1518.500 through 1518.502) of Safety & Health Regulations for Construction.

PART 2: PRODUCTS (Not Applicable)

PART 3: EXECUTION (Not Applicable)

END OF SECTION

SECTION 01605 - PRODUCTS AND SUBSTITUTIONS

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 RELATED DOCUMENTS

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

1.2 DESCRIPTION OF REQUIREMENTS

- A. Definitions: "Products" is defined to include purchased items for incorporation into the work, regardless of whether specifically purchased for project or taken from Contractor's stock of previously purchased products. "Materials", is defined as products which must be substantially cut, shaped, worked, mixed, finished, refined or otherwise fabricated, processed, installed or applied to form units of work. "Equipment" is defined as products with operational parts, regardless of whether motorized or manually operated, and particularly including products with service connections (wiring, piping, etc.). Definitions in this paragraph are not intended to negate the meaning of other terms used in contract documents, including "specialties", "systems", "structure", "finishes", "accessories", "furnishings", "special construction", and similar terms, which are self-explanatory and have recognized meanings in the construction industry.
- B. Substitutions: The requirements for substitutions do not apply to specified Contractor options on products and construction methods. Revisions to contract documents, where requested by Owner, Architect or Engineer, are "changes" not "substitutions". Requested substitutions during bidding period, which have been accepted prior to Contract Date, are included in contract document and are not subject to requirements for substitutions as specified herein. Contractor's determination of and compliance with governing regulations and orders issued by governing authorities do not constitute "substitutions"; and do not constitute a basis for change orders, except as provided for in contract documents. Otherwise, Contractor's requests for changes in products, materials and methods of construction required by contract documents are considered requests for "substitutions", and are subject to requirements hereof.
- C. Standards: Refer to Division I section "Definitions and Standards" for applicability of industry standards to products of project, and for acronyms used in text of specification sections.

1.3 QUALITY ASSURANCE

- A. Source Limitations: To the greatest extent possible for each unit of work, provide products, materials or equipment of a singular generic kind from a single source.
- B. Finish Materials: Finish materials installed within a single room or area or within contiguous areas, or on the exterior, shall be from a single production run to assure color/pattern/finish consistency. Color, pattern, or finish variations, not represented by the approved samples and judged by the Architect/Engineer to be objectionable will result in rejection of the material, without regard for whether the variations are caused by inter-mixing of materials from more than one production run, or by Installer not

following manufacturer's instructions for blending of material from a single production rim. This paragraph relates to both exterior and interior finish materials.

- C. Compatibility of Options: Where more than one choice is available as options for Contractor's selection of a product or material, select an option which is compatible with other products and materials already selected (which may have been from among options for those other products and materials). Compatibility is a basic general requirement of product/material selections.
- D. Approved or Acceptable Manufacturers: The specification sections may identify acceptable or approved manufacturers with a paragraph which states the following, or words of the same effect:

Subject to compliance with requirements, provide products of one of the following:

The manufacturers listed are those that are believed to provide products of acceptable and comparable quality and which satisfy the requirements of the specifications. Since manufacturers, from time to time, change the quality of their products, some manufacturer's products may not conform to the requirements of the specifications. Those manufacturers are hereby advised that specification requirements will not be waived to accept their products simply because they were named as an acceptable or approved manufacturer.

1.4 SUBMITTALS

- A. Requests for Substitutions: Submit 3 copies, fully described for product or method being replaced by substitution, including related specification section and drawings number(s), and fully documented to show compliance with requirements for substitutions. Include product data/drawings, description of methods, samples where applicable, Contractor's detailed comparison of significant qualities between specified item and proposed substitution, statement of effect of construction time and coordination with other affected work, cost information or proposal, and Contractor's statement to the effect that proposed substitution will result in overall work equal-to-or-better-than work originally indicated.

1.5 PRODUCT DELIVERY-STORAGE-HANDLING

- A. General: Deliver, handle and store products in accordance with manufacturer's recommendations and by methods and means which will prevent damage, deterioration, and loss including theft. Control delivery schedules to minimize long term storage of products at site and overcrowding of construction spaces. In particular, provide deliver/installation coordination to ensure minimum holding or storage times for products recognized to be flammable, hazardous, easily damage, or sensitive to deterioration, theft and other sources of loss.

1.6 WARRANTIES (GUARANTEES)

- A. Categories of Specific Warranties: Warranties on the work are in several categories, including those of General Conditions, and including (but not necessarily limited to) the following specific categories related to individual units of work specified in sections of Divisions 2 through 16 of these specifications:

1. Special Project Warranty (Guarantee): A warranty specifically written and signed by Contractor for a defined portion of the work; and, where required, countersigned by subcontractor, installer, manufacturer or other entity engaged by Contractor.
 2. Specified Product Warranty: A warranty which is required by contract documents, to be provided for a manufactured product incorporated into the work; regardless of whether manufacturer has published a similar warranty without regard for specific incorporation of product into the work, or has written and executed a special project warranty as a direct result of contract documents requirements.
 3. Coincidental Product Warranty: A warranty which is not specifically required by contract documents (other than as specified in this Section); but which is available on a product incorporated into the work, by virtue of the fact that manufacturer of product has published warranty in connection with purchases and uses of product without regard for specific applications except as otherwise limited by terms of warranty.
- B. Refer to individual sections of Divisions 2 through 16 for the determination of units of work which are required to be specifically or individually warranted, and for the specific requirements and terms of those warranties (or guarantees).
- C. General Limitations: It is recognized that specific warranties are intended primarily to protect Owner against failure of the work to perform as required, and against deficient, defective and faulty materials and workmanship, regardless of sources. Except as otherwise indicated, specific warranties do not cover failures in the work which result from: 1) Unusual and abnormal phenomena of the elements, 2) The Owner's misuse, maltreatment or improper maintenance of the work, 3) Vandalism after time of substantial completion, or 4) Insurrection or acts of aggression including war.
- D. Related Damages and Losses: In connection with Contractor's correction of warranted work which has failed, remove and replace other work on project which has been damaged as a result of such failure, or must be removed and replaced to provide access for correction of warranted work.
1. Consequential Damages: Except as otherwise indicated or required by governing regulations, special project warranties and product warranties are not extended to cover damage to building contents (other than work of Contract) which occurs as a result of failure of warranted work.
- E. Reinstatement of Warranty Period: Except as otherwise indicated, when work covered by a special project warranty or product warranty has failed and has been corrected by replacement or restoration, reinstate warranty by written endorsement for the following time period, stating on date of acceptance of replaced or restored work.
1. A period of time equal to original warranty period of time.

- F. Replacement Cost, Obligations: Except as otherwise indicated, costs of replacing or restoring failing warranted units or products is Contractor's obligation, without regard for whether Owner has already benefited from use through a portion of anticipated useful services lives.
- G. Contractor's Procurement Obligations: Do not purchase, subcontract for, or allow others to purchase or subcontract for material or units of work for project where a special project warranty, specified product warranty, certification or similar commitment is required, until it has been determined that entities required to countersign such commitments are willing to do so.
- H. Specific Warranty Forms: Where a special project warranty (guarantee) or specified product warranty is required, prepare a written document to contain terms and appropriate identification, ready for execution (through Architect/Engineer) for approval prior to final executions.

PART 2: PRODUCTS

2.1 GENERAL PRODUCT COMPLIANCES

- A. General: The compliance requirements, for individual products as indicated in contract documents, are multiple in nature and may include generic, descriptive, proprietary, performance, prescriptive, compliance with standards, compliance with codes, conformance with graphic details and other similar forms and methods of indicating requirements, all of which must be complied with. Also "allowances" and similar provisions of contract documents will have a bearing on selection process.
- B. Procedures for Selecting Products: Contractor's options for selecting products are limited by contract document requirements, and governing regulations, and are not controlled by industry traditions or procedures experienced by Contractor on previous construction projects. Required procedures include, but are not necessarily limited to, the following for various indicated methods of specifying:
 - 1. Single Product/Manufacturer Name: Provide product indicated, except advise Architect/Engineer before proceeding, where known that named product is not a feasible or acceptable selection.
 - 2. Two or More Product/Manufacturer Names: Provide one of the named products, at Contractor's option; but excluding products which do not comply with requirements. Do not provide or offer to provide an unnamed product, except where none of named products comply with requirements or are a feasible selection; advise Architect/Engineer before proceeding.
 - 3. "Or Equal": Where named products in specifications text are accompanied by the term "or equal", or other language of similar effect, comply with those contract document provisions concerning "substitutions" for obtaining Architect's/Engineer's approval (by change order) to provide an unnamed product.

4. Standards, Codes and Regulations: Where only compliance with an imposed standard, Code or regulation is required, selection from among products which comply with requirements including those standards, codes and regulations, is Contractor's option.
5. Performance Requirements: Provide products which comply with specific performances indicated, and which are recommended by manufacturer (in published product literature or by individual certification) for application indicated. Overall performance of a product is implied where product is specified with only certain specific performance requirements.
6. Prescriptive Requirements: Provide products which have been produced in accordance with prescriptive requirements, using specified ingredients and components, and complying with specified requirements for mixing, fabricating, curing, finishing, testing, and similar operations in manufacturing process.
7. Visual Matching: Where matching with an established sample is required, final judgment of whether a product proposed by Contractor matches sample satisfactorily is Architects/Engineers judgment. Where no product within specified cost category is available, which matches sample satisfactorily and complies with requirements, comply with contract documents provisions concerning, "substitutions" and "change orders" for selection of a matching product outside established cost category or, of a product not complying with requirements.
8. Visual Selection: Except as otherwise indicated, where specified product requirements include "...as selected from manufacturer's standard colors, patterns, textures..." or words of similar effect, the selection of manufacturer and basic product (complying with requirements) is Contractor's option, and subsequent selection of color, pattern and texture is Architects/Engineers selection.

2.2 *SUBSTITUTIONS*

- A. Conditions: Contractor's request for substitution will be received and considered when extensive revisions to contract documents are not required and changes are in keeping with general intent of contract documents; when timely, fully documented and properly submitted; and when one or more of the following conditions is satisfied, all as judged by Architect/Engineer. Otherwise, requests will be returned without action except to record non-compliance with these requirements.
 1. Where required product, material or method cannot be provided within Contract Time, but not as a result of Contractor's failure to pursue the work promptly or to coordinate various activities properly.
 2. Where required product, material or method cannot be provided in a manner which is compatible with other materials of the work, or cannot be properly coordinated therewith, or cannot be warranted as required, or cannot be used without adversely affecting Owner's insurance coverage on completed work, or will encounter other substantial non-compliances which are not possible to otherwise overcome except by making requested substitution, which

Contractor thereby certifies to overcome such non-compatibility, non coordination, non-warranty, non-insurability or other non-compliance as claimed.

3. Where required product, material or method cannot receive required approval by a governing authority, and requested substitution can be so approved.
 - a. Submit within 10 days of Notice To Proceed, any proposed substitutions with reason for the substitution as outlined above.
- B. Work-Related Submittals: Contractor's submittal of, and Architect's/Engineer's approval of, shop drawings, product data or samples which relate to work not complying with requirements of contract documents, does not constitute an acceptable or valid request for a substitution, nor approval thereof.

2.3 *GENERAL PRODUCT REQUIREMENTS*

- A. General: Provide products which comply with requirements, and which are undamaged and unused at time of installation, and which are complete with accessories, trim, finish, safety guards, and other devices and details needed for complete installation and for intended use and effect.
- B. Nameplates: Except as otherwise indicated for required approval labels, and operating data, do not permanently attach or imprint manufacturer's or producer's nameplates or trademarks on exposed surfaces of products which will be exposed to view either in occupied spaces or on exterior of the work.
 1. Labels: Locate required labels and stamps on a concealed surface or, where required for observation after installation, on an accessible surface which, in occupied spaces, is not conspicuous.
 2. Equipment Nameplates: Provide permanent nameplate on each item of service-connected or power operated equipment. Indicate manufacturer, product name, model number, serial number, capacity, speed, ratings and similar essential number, capacity, speed, ratings and similar essential operating data. Locate nameplates on an easily accessed surface which, in occupied spaces, is not conspicuous.

PART 3: EXECUTION (Not Applicable)

END OF SECTION

SECTION 01700 - PROJECT CLOSEOUT

PART 1-GENERAL

1.1 RELATED DOCUMENTS

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

1.2 DESCRIPTION OF REQUIREMENTS

- A. Definitions: Closeout is hereby defined to include general requirements near end of Contract Time, in preparation for final acceptance, final payment, normal termination of contract, occupancy by Owner and similar actions evidencing completion of the work. Specific requirements for individual units of work are specified in sections of Division 2 through 16. Time of closeout is directly related to "Substantial Completion", and therefore may be either a single time period for entire work or a series of time periods for individual parts of the work which have been certified as substantially complete at different dates. That time variation (if any) shall be applicable to other provisions of this section.

1.3 PREREQUISITES TO SUBSTANTIAL COMPLETION

- A. General: Prior to requesting Architect' s/Engineer's inspection for certification of substantial completion (for either entire work or portions thereof), complete the following and list known exceptions in request:
 - 1 . In progress payment request, coincident with or first following date claimed, show either 100% completion for portion of work claimed as "substantially complete", or list incomplete items, value of incompleteness, and reasons for being incomplete.
 - 2. Include supporting documentation for completion as indicated in these contract documents.
 - 3. Submit statement showing accounting of changes to Contract Sum.
 - 4. Advise Owner of pending insurance change-over requirements.
 - 5. Submit specific warranties, workmanship/maintenance bonds, maintenance agreements, final certifications and similar documents.
 - 6. Obtain and submit releases enabling Owner's full and unrestricted use of the work and access to services and utilities, including (where required) occupancy permits, operating certificates, and similar releases.
 - 7. Deliver tools, spare parts, extra stocks of materials, and similar physical items to Owner.

8. Complete start-up testing of systems, and instructions of Owner's operating/maintenance personnel. Discontinue (or change over) and remove from project site temporary facilities and services, along with construction tools and facilities, mock-ups, and similar elements.
 9. Complete final cleaning up requirements, including touch-up painting of marred surfaces.
- B. Inspection Procedures: Upon receipt of Contractor's request, Architect/Engineer will either proceed with inspection or advise Contractor of prerequisites not fulfilled. Following initial inspection, Architect/Engineer will either prepare certificate of substantial completion, or advise Contractor of work which must be performed prior to issuance of certificate; and repeat inspection when requested and assured that work has been substantially completed. Results of completed inspection will form initial "punchlist" for final acceptance.

1.4 PREREQUISITES TO FINAL ACCEPTANCE

- A. General: Prior to requesting Architect's/Engineer's final inspection for certification of final acceptance and final payment, as required by General Conditions, complete the following and list known exceptions (if any) in request:
1. Submit final payment request with final releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.
 2. Submit updated final statement, accounting for additional (final) changes to Contract Sum.
 3. Submit certified copy of Architect's/Engineer's final punch-list of itemized work to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance, endorsed and dated by Architect/Engineer.
 4. Submit final meter readings for utilities, measured record of stored fuel, and similar data as of time of substantial completion or when Owner took possession of and responsibility for corresponding elements of the work.
 5. Submit consent of surety and waiver of liens.
 6. Submit final liquidated damages settlement statement, acceptable to Owner.
 7. Revise and submit evidence of final, continuing insurance coverage complying with requirements.
- B. Re-inspection Procedure: Upon receipt of Contractor's notice that the work has been completed, including punch list items resulting from earlier inspections, and excepting incomplete items delayed because of acceptable circumstances, Architect/Engineer will re-inspect the work. Upon completion of re-inspection, Architect/Engineer will either prepare certificate of final acceptance or advise Contractor of work not completed or obligations not fulfilled as required for final acceptance. If necessary, procedure will be repeated.

1.5 RECORD DOCUMENT SUBMITTALS

- A. General: Specific requirements for record documents are indicated in individual sections of these specifications. Other requirements are indicated in General Conditions. General submittal requirements are indicated in "submittals" section. Do not use record documents for construction purposes; protect from deterioration and loss in a secure, fire-resistive location; provide access to record documents for Architect's/Engineer's reference during normal working hours.
- B. Record Drawings: Maintain a white-print set (blue-line or black-line) of contract drawings and shop drawings in clean, undamaged condition, with mark-up of actual installations which vary substantially from the work as originally shown. Mark whichever drawing is most capable of showing "field" condition fully and accurately; however, where shop drawings are used for mark-up, record a cross reference at corresponding location on working drawings. Mark with red erasable pencil and, where feasible, use other colors to distinguish between variations in separate categories of work. Mark-up new information which is recognized to be of importance to Owner, but was for some reason not shown on either contract drawings or shop drawings. Give particular attention to concealed work, which would be difficult to measure and record at later date. Note: relate change order numbers where applicable. Organize record drawing sheets into manageable sets, bind with durable paper cover sheets, and print suitable titles, dates and other identification on cover of each set.
- C. Record Specifications: Maintain one copy of specifications, including addenda, change orders and similar modifications issued in printed form during construction, and mark-up variations (of substance) in actual work in comparison with text of specifications and modifications as issued. Give particular attention to substitutions, selection of options, and similar information on work where it is concealed or cannot otherwise be readily discerned at a later date by direct observation. Note related record drawing information and product data, where applicable. Upon completion of mark-up, submit to Architect/Engineer for Owner's records.
- D. Maintenance Manual: Organize maintenance-and-operating manual information into suitable sets of manageable size, and bind into individual binders properly identified and indexed (thumb-tabbed). Include emergency instructions, spare parts listing, copies of warranties, wiring diagrams, recommended "turn-around" cycles, inspection procedures, shop drawing, product data, and similar applicable information. Bind each manual of each set in a heavy-duty 2", 3-ring vinyl covered binder, and include pocket folders for folded sheet information. Mark identification on both front and spine of each binder.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 CLOSEOUT PROCEDURES

- A. General Operating/Maintenance Instructions: Arrange for each installer of work requiring continuing maintenance or operation, to meet with Owner's personnel, at project site, to provide basic instructions needed for proper operation and maintenance of entire work. Include instructions by manufacturer's

representatives where installers are not expert in the required procedures. Review maintenance manuals, record documentation, tools, spare parts and materials, lubricants, fuels, identification system, control sequences, hazards, cleaning and similar procedures and facilities. For operational equipment, demonstrate startup, shutdown, emergency operations, noise and vibration adjustments, safety, economy/efficiency adjustments, energy effectiveness, and similar operations. Review maintenance and operations in relation with applicable warranties, agreements to maintain, bonds, and similar continuing commitments.

3.2 FINAL CLEANING

- A. General: Special cleaning for specific units of work is specified in sections of Divisions 2 through 16. General cleaning during progress of work is specified in General Conditions and as temporary services in "Temporary Facilities" section of this Division. Provide final cleaning of the work, at time indicated, consisting of cleaning each surface or unit of work to normal "clean" condition expected for a first-class building cleaning and maintenance program. Comply with manufacturer's instructions for cleaning operations. The following are examples, but not by way of limitation, of cleaning levels required:
1. Remove labels which are not required as permanent labels.
 2. Clean transparent materials, including mirrors and window/door glass, to a polished condition, removing substrates which are noticeable as vision obscuring materials. Replace broken glass and damaged transparent materials.
 3. Clean exposed exterior and interior hard-surfaced finishes, to a dirt-free condition, free of dust, stains, films and similar noticeable distracting substrate. Except as otherwise indicated, avoid disturbance of natural weathering of exterior surfaces. Restore reflective surfaces to original reflective condition.
 4. Remove debris and surface dust from limited access spaces including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics and similar spaces.
 5. Vacuum clean carpeted surfaces and similar soft surfaces.
 6. Clean project site (yard and grounds), including landscape development areas, of litter and foreign substances. Sweep paved areas to a broom clean condition; remove stains, petro-chemical spills and other foreign deposits. Rake grounds which are neither planted nor paved, to a smooth, even-textured surface.
 7. Lubricant properly and completely all machinery in this contract.
 8. The windows furnished for this project are a finished product and shall be treated as such by all trades. The General Contractor shall see that these windows are not mistreated or abused. The masonry and plaster Contractor shall be sure that mortar or plaster spots are not allowed to stay on aluminum surfaces for more than 12 hours. Windows shall not be used as supports for scaffolding or any other purpose that will damage them. The General Contractor shall provide the

necessary protection of all windows from misuse or damage during the course of erection and shall clean all plaster, mortar or other foreign materials from the windows after installation and glazing. All glass in windows, exterior and interior, shall be cleaned with glass cleaner.

- B. Restoration of Site: At completion of Project and before leaving job site, Contractor shall be responsible for restoring the site to the original state in which he found it at the start of the Project. This will include repair of grass areas used for storage of materials or stockpiling of debris, and repair of any other areas on property which the Contractor has damaged in the course of his work.
- C. Removal of Protection: Except as otherwise indicated or requested by Architect/Engineer, remove temporary protection devices and facilities which were installed during course of the work to protect previously completed work during remainder of construction period.
- D. Compliances: Comply with safety standards and governing regulations for cleaning operations. Do not burn waste materials at site, or bury debris or excess materials on Owner's property, or discharge volatile or other harmful or dangerous materials into drainage systems; remove waste materials from site and dispose of in a lawful manner.

3.3 OWNER ATTIC STOCK FOR FURNISHED ITEMS

- A. The Contractors on the project shall provide the following items and amounts to the Owner at the end of the project.
 - 1. Two full unopened cans of paint for each color selection.
 - 2. Minimum of 50 ceiling tiles for each selection on the project.
 - 3. Minimum of 2 full boxes of each VCT flooring selected on the project.
 - 4. Minimum of 50 Carpet Tiles for each selection on the project.

1.

END OF SECTION

SECTION 01710 - CLEANING

PART 1: GENERAL. The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 GENERAL WORK BY EACH CONTRACTOR

Remove from glass, all stains, labels, and paint and then wash. Do not remove labels until Engineer notifies Contractor that he has checked same for grading. Before final acceptance, General Contractor shall wash and clean all windows, interior and exterior.

Remove all marks, stains, fingerprints, and other soil and dirt from painted work.

Clean and polish, removing all stains, dust, dirt, paint, etc. from hardware.

Clean off all ink, stains dirt, dust, oil, paint, etc., from fixtures and equipment.

Clean and polish all floors. All carpeting shall be vacuumed clean.

Lubricant properly and completely all machinery in this contract.

Remove all foreign materials from roof.

Remove all foreign materials from lawn and site area.

All pavement and sidewalk areas shall be left broom clean.

The windows furnished for this project are a finished product and shall be treated as such by all trades. The General Contractor shall see that these windows are not mistreated or abused. The masonry and plaster Contractor shall be sure that mortar or plaster spots are not allowed to stay on aluminum surfaces for more than 12 hours. Windows shall not be used as supports for scaffolding or any other purpose that will damage them. The General Contractor shall provide the necessary protection of all windows from misuse or damage during the course of erection and shall clean all plaster, mortar or other foreign materials from the windows after installation and glazing.

1.2 MECHANICAL AND ELECTRICAL CONTRACTOR

The Mechanical Contractor and Electrical Contractor shall lubricate properly and completely, all machinery. (See Mechanical and Electrical Sections for required items of cleaning.)

1.3 ALL CONTRACTORS

During construction all contractors shall be responsible for removing debris left by his work at frequent intervals in order that no large accumulation of debris be left for any length of time. Each contractor shall remove all tools, scaffolding, waste materials caused by operations under his charge and at completion of job leave his work in cleaned condition satisfactory to the Owner and Engineer.

SECTION 01740 - WARRANTIES

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for warranties required by the Contract Documents, including manufacturers standard warranties on products and special warranties.
 - 1. Refer to the General Conditions for terms of the Contractor's period for correction of the Work.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Division I Section "Contract Closeout" specifies contract closeout procedures.
 - 2. Divisions 2 through 16 Sections for specific requirements for warranties on products and installations specified to be warranted.
 - 3. Certifications and other commitments and agreements for continuing services to Owner are specified elsewhere in the Contract Documents.
- C. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products. Manufacturer's disclaimers and limitations on product warranties do not relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.
- D. The entire project shall be covered by a 1 year warranty starting from the date of Substantial Completion.

1.3 DEFINITIONS

- A. Standard product warranties are preprinted written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the Owner.
- B. Special warranties are written warranties required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide greater rights for the Owner.

1.4 WARRANTY REQUIREMENTS

- A. Related Damages and Losses: When correcting failed or damaged warranted construction, remove and replace construction that has been damaged as a result of such failure or must be removed and replaced to provide access for correction of warranted construction.
- B. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
- C. Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of the Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.
- D. Owner's Recourse: Expressed warranties made to the Owner are in addition to implied warranties and shall not limit the duties, obligations, rights, and remedies otherwise available under the law. Expressed warranty periods shall not be interpreted as limitations on the time in which the Owner can enforce such other duties, obligations, rights, or remedies.
 - 1. Rejection of Warranties: The Owner reserves the right to reject warranties and to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
- E. Where the Contract Documents require a special warranty, or similar commitment on the Work or part of the Work, the Owner reserves the right to refuse to accept the Work, until the Contractor presents evidence that entities required to countersign such commitments are willing to do so.

1.5 SUBMITTALS

- A. Submit written warranties to the Architect/Engineer prior to the date certified for Substantial Completion. If the Architect's/Engineer's Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the Architect/Engineer.
 - 1. When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the Architect/Engineer within 15 days of completion of that designated portion of the Work.
- B. When the Contract Documents require the Contractor, or the Contractor and a subcontractor, supplier or manufacturer to execute a special warranty, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties. Submit a draft to the Owner, through the Architect/Engineer, for approval prior to final execution.

- C. Form of Submittal: At Final Completion compile 2 copies of each required warranty properly executed by the Contractor, or by the Contractor, subcontractor, supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the table of contents of the Project Manual.
- D. Bind warranties and bonds in heavy-duty, commercial quality, durable 3-ring, vinyl-covered loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8 ½" X 11" paper.
 - 1. Provide tabbed divider for each separate warranty. Mark the tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product, and the name, address, and telephone number of the Installer.
 - 2. Identify each binder on the front and spine with the typed or printed title "WARRANTIES", Project title or name, and name of the Contractor.
 - 3. When warranted construction requires operation and maintenance manuals, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.

PART 2: PRODUCTS (Not Applicable)

PART 3: EXECUTION

3.1 *LIST OF WARRANTIES*

- A. Provide warranties on products and installations as specified in Division 2 through 16 Sections.

END OF SECTION

SECTION 02050 - DEMOLITION

PART 1: GENERAL. The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 REMOVAL

This Section requires the removal and subsequent off-site disposal of the following:

- A. Demolition items shown, indicated, and referenced on the drawings and other items required for the building renovation project.

1.2 CONDITION OF STRUCTURES

- A. The Owner assumes no responsibility for the actual condition of items that are to be removed, replaced, and or repaired. Field verify condition of existing structure prior to start of any work.

1.3 PROTECTIONS

- A. Provide temporary barricades and other forms of protection as required to protect the Owner's personnel and general public from injury due to demolition work.
- B. Provide protective measures as required to provide free and safe passage of Owner's personnel and general public to and from the site.
- C. Protect existing site utilities, which are to remain in use.

1.4 DAMAGES

- A. Promptly repair all damages caused to adjacent facilities by demolition work at no cost to the Owner.

1.5 TRAFFIC

- A. Conduct demolition operations and debris removal in a manner to ensure minimum interference with roads, streets, walks, lawns, and other adjacent occupied or used facilities.

1.6 UTILITY SERVICES

- A. Maintain existing utilities indicated to remain. Keep in service and protect against damage during demolition operations.

PART 2: PRODUCTS (Not Applicable)

PART 3: EXECUTION (Not Applicable)

END OF SECTION

SECTION 5400 - LIGHT GAGE METAL FRAMING

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 SCOPE

Work includes installation of all light gage metal framing as shown on the drawings.

1.2 SUBMITTALS

- A. Submit manufacturer's product literature and installation instructions for type of stud or channel specified on the drawings.
- B. Submit data showing physical properties of fasteners to be incorporated with this work.

1.3 QUALITY ASSURANCE

- A. Installer: To be a regularly engaged in the installation of light gage metal framing work specified and shall have proper experience to install the work specified.
- B. Manufacturer: The manufacturer shall be a company regularly engaged in the manufacturer of the light gage metal framing specified.

PART 2: PRODUCTS

2.1 METAL STUDS

- A. Size, spacing, and gage are called for on the drawings along with the type/model as mfg. by ClarkWestern Building Systems, Inc. Other mfg. will be allowed upon approval.
Use 16 gage metal studs on either side of all door openings and for all lintels for openings.

2.2 METAL TRACKS

- A. Tracks shall be of the same gage as the metal studs unless otherwise noted on the drawings.

2.3 CONNECTIONS

- A. Connections shall be as standard by the mfg. installation instructions for the type of work shown.

PART 3: EXECUTION

3.1 INSTALLATION

All products to be installed in strict accordance with the manufacturer's installation specifications.

END OF SECTION

SECTION 07200 - INSULATION

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 SCOPE

Work includes installation of all insulation shown on the drawings.

1.2 SUBMITTALS

- A. Submit manufacturer's product literature and installation instructions for type of insulation required.
- B. Submit data showing physical properties of fasteners to be incorporated with this work, including test data from an independent testing laboratory showing pull-out resistance.

1.3 QUALITY ASSURANCE

- A. Installer: To be a regularly engaged in the installation of insulation work specified and shall have have proper experience to install the work specified.
- B. Manufacturer: The manufacturer shall be a company regularly engaged in the manufacturer of the insulation specified.

PART 2: MATERIAL

2.1 ROOF INSULATION (Not on this Project)

- A. The roof insulation shall be Polyisocyanurate of the thickness stated on the drawings.
- B. Thermal resistance: R=7.1 per inch thickness, conditioned

2.2 FIBERGLASS BATTEN WALL INSULATION

- A. Where specified, fiberglass wall insulation shall be of the thickness called for and shall be manufactured by Owens-Corning, or equal.
- B. Where called for, the insulation shall have an integral vapor barrier.

2.3 FOUNDATION PERIMETER INSULATION (Not on this Project)

- A. Foundation perimeter insulation shall be Owens Corning Foamular 250 Insulation, or equal, of the thickness stated on the drawings.
- B. Thermal Resistance: R=5.0 per inch thickness, conditioned.

2.4 *MASONRY FILL INSULATION (Not on this Project)*

- A. The exterior concrete masonry wall insulation shall be Cor-Fill 500 as manufactured by Tailored Chemical Products, Inc., or equal.
- B. Product to be installed by injection into all open cores or through drilled holes in mortar joints. All holes to be repaired to appear as before drilling.
- C. Thermal Resistance: R=20 for 12 inch block/60 lbs density.
R=14.2 for 8 inch block/60 lbs density.

PART 3: EXECUTION

3.1 *INSTALLATION*

All products to be installed in strict accordance with the manufacturer's installation specifications.

3.2 *TRAINING*

Where special training is required, the installer shall be trained in accordance with the manufacturer's training program and shall be experience in the installation of such work.

END OF SECITON

SECTION 07900 - JOINT SEALANTS

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 SCOPE

This section shall include all materials, equipment, and labor necessary for the installation of joint sealants on the project.

- A. Qualified Applicator: Franchised by sealant manufacturer; at least three years experience in similar work with satisfactory results, subject to the Engineers' approval. Install materials using experienced workmen, skilled in this type application, with equipment approved by the manufacturer.

1.2 SUBMITTALS

- A. Submit manufacturer's specifications for the compounds; include methods of application and proposed color for each type of installation.
- B. Submit color samples.

1.3 ENVIRONMENTAL REQUIREMENTS

- A. Acceptable temperature range for sealant Application: 65 deg. to 90 deg.
- B. Stop exterior sealant work during inclement weather and do not restart until surfaces adjacent to the joint to be sealed are perfectly dry.

PART 2: PRODUCTS

2.1 MATERIALS

- A. Multi-Component Urethane Sealant, for non-sag applications:
 - 1. Non-modified, air-curing, elastomeric sealant complying with ASTM C 920-86 Type M, Grade NS, Class 25. Select from one of the following manufacturers and products, or equal:
 - a. Tremco, Dymeric.
 - b. Pecora, Dynatrol II.
 - c. Sonneborn Building Products, Sonolastic NP 2.
- B. Multi-Component Urethane Sealant, for self-leveling applications:
 - 1. Complying with Federal Specification TT-S-00227E, Class A, Type 1:
 - a. Tremco, THC-900.
 - b. Pecora, Urexpan NR-200.
 - c. Sonneborn Building Products, Sonolastic SL1.
- C. Acrylic Latex Sealant:
 - 1. Complying with ASTM C-834-86.
 - a. Tremco, Acrylic Latex 834.
 - b. Pecora, AC-20.
 - c. Sonneborn Building Products, Sonolac.
- D. Sanitary Silicone Rubber., one part, moisture cure.
 - 1. Complying with ASTM C-920, Type S, NX, Class 25.
 - a. Dow Corning, 786 Mildew Resistant Silicone Sealant.
 - b. General Electric Company, Sanitary 1700 Sealant.
 - c. Rhone-Poulenc Inc., Rhodorsil 6B.

- E. Primer: As recommended by manufacturer for the use intended.
- F. Primer (Silicone): As recommended by sealant manufacturer.
- G. Backer Rod: Expanded, closed cell polyethylene; as recommended by sealant manufacturer.
- H. Bond-Breaker: Polyethylene tape; as recommended by sealant manufacturer.

PART 3: EXECUTION

3.1 *CONDITION OF SURFACES*

- A. Examine all surfaces which are to receive this work for any conditions detrimental to the proper or timely completion of this work. Do not proceed with this work until such conditions have been corrected and are acceptable.

3.2 *JOINT DESIGN*

- A. Sealant joints shall conform to the following criteria.
 - 1. No joint less than 1/4 inch in width or depth.
 - 2. Joints up to 1/2 inch in width shall have equal depth.
 - 3. Joints over 1/2 inch in width shall have depth equal to 1/2 the width.
 - 4. Control joints in concrete slabs, 1/8 inch width.
- B. Provide backer rod as specified to limit depth of joints. In shallow joints where use of backer rod is restricted, provide bond-breaker tape.

3.3 *APPLICATION*

- A. Joints and spaces to be sealed shall be clean, dry and free from dust, loose mortar and other foreign materials.
- B. Clean ferrous metals of all rust, mill scale and coatings by wire brush, grinding or sandblasting. Remove oils and grease with solvent-based materials such as Zylol, toluol or methyl ketone. Do not use soap, detergent or water soluble cleaners.
- C. Mask adjacent surfaces with masking tape prior to priming and sealing. Remove tape after joint has been tooled.
- D. After joints have been completely filled, they shall be neatly tooled to a slightly concave surface.
- E. Immediately clean adjacent materials which have been soiled; leave work in a neat, clean condition.
- F. Repair and correct defects in work due to faulty materials, methods of workmanship. Make good any adjacent work damaged by such defects.

3.4 *DEFLECTIVE WORK.*

- A. The following types of failure will be adjudged defective work: breakage, cracking, crumbling, melting, shrinking, running, hardening or staining adjacent surfaces, adhesive failure and cohesive failure. Correct defective work.

3.5 *COLOR.*

- A. Sealant, Generally: Color of the adjacent material which lies in the same plane as the sealant. Sanitary silicone sealant shall be white.

3.6 *APPLICATION.*

- A. Use urethane type sealants as exterior where sealant is indicated or if not indicated, as required to provide a weather-tight joint between dissimilar materials.
- B. Use acrylic latex type sealant at interior locations where indicated or required to provide a seal between dissimilar materials.
- C. Use sanitary silicone sealant at interior locations between plumbing fixtures and building construction and between casework and wall construction.
- D. Use one-part nonsag urethane sealant or multi-part nonsag urethane sealant (NT) for expansion and control joints in masonry, other than stone.

END OF SECTION

SECTION 08110 - HOLLOW METAL STEEL DOORS & FRAMES

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 WORK INCLUDED

- A. Furnish all items shown on drawings and as specified including, but not limited to, the following.
 - 1. Steel Doors.
 - 2. Steel Door Frames.
 - 3. Steel Sidelight, Borrowed lite & transom frames.

1.2 REFERENCES

- A. Steel Doors and Frames must meet the following standards:
 - 1. Door and Hardware Preparation ANSI 115.
 - 2. Life Safety Codes NFPA-101 (Latest Edition).
 - 3. Fire Doors and Windows NFPA-80 (Latest Edition).
 - 4. Steel Door Institute ANSI/SDI-100 (Latest Edition).

1.3 QUALITY ASSURANCE

- A. Provide Steel Doors and Frames manufactured by a single firm specializing in the production of this type of work.
- B. Provide Steel Doors and Frames complying with the Steel Door Institute recommended specifications for Standard Steel Doors and Frames ANSI/SDI 100 (Latest Edition), and as herein specified.

PART 2: PRODUCTS

2.1 ACCEPTABLE MANUFACTURES

- A. Doors to be steel flush leafs by "Republic Builders Products, Ceco Door Products, or equal.

2.2 HARDWARE LOCATIONS AND GENERAL REINFORCEMENTS

- A. Locate hardware on doors and frames in accordance with the manufacturers standard location.
- B. Hardware reinforcements to be in accordance with minimum standard gages as listed in SDI-100.

2.3 STEEL DOORS

- A. Material - Exterior Doors
 - 1. Face Sheets are to be made of commercial quality 18 gage hot dipped A60 zinc coated steel that complies with ASTM A525.
 - 2. Vertical edges shall join the face sheets by manufacturers standard weld pattern extending the full height of the door. Welds are to be ground, filled and dressed smooth to make invisible and provide a smooth flush surface.
 - 3. Hinge reinforcement shall be not less than 8 gage.

4. Reinforce tops and bottoms of all doors with a continuous steel channel not less than 16 gage, extending the full width of the door and welded to the face sheet.
5. Door Cores - doors are to be completely filled with rigid polyurethane or polystyrene core chemically bonded to all interior surfaces.

B. Materials - Interior Doors

1. Face sheets are to be made of commercial quality 18 gage cold rolled steel that complies with ASTM A366 or 620.
2. Vertical edges shall be mechanically interlocked with a hairline edge scam.
3. Hinge reinforcement shall be not less than 8 gage.
4. Reinforce tops and bottoms of all doors with continuous steel channel not less than 16 gage, extending the full width of the door and welded to the face sheet.
5. Door Cores - Doors shall have a one piece resinimpregnated honeycomb core with sanded edges securely bonded to both face sheets.

2.4 STEEL FRAMES

A. Materials for all exterior frames.

1. Shall be 14 gage hot dipped A60 zinc coated steel that complies with ASTM designation A525.
2. All frames are to be assembled so that the face miter seam is closed and tight. Corners shall be welded.

B. Materials for all other frames.

1. Shall be 16 gage that complies with ASTM A366 or ASTM A568.
2. Frames to be assembled so that the face miter seam is closed tight. Frames shall be of "knock-down" construction.

C. Anchors.

1. Floor anchors at each jamb.
2. Anchors at masonry walls to be wire type not less than 0.156 inch diameter steel wire.
3. Anchors in stud partitions to be steel of suitable design, not less than 18 gage.
4. Except on weather strip doors, drill stop to receive 3 silencers on a single door frame and 2 silencers on a double door frame.

2.5 PRIME FINISH

- A. Doors and frames to be cleaned, chemically treated, and all exposed surfaces receive factory applied coat of rust inhibiting primer.**

PART 3: EXECUTION

3.1 INSPECTION

- A. The G.C. shall make sure that all dimensions for openings are accurate.**
B. The G.C. shall correct all scratches or disfigurements caused by shipping and handling.

3.2 INSTALLATION

- A. Install doors per SDI-105 "Recommended Erection Instructions for steel Frames" and SDI-110 "Standard Steel Door and Frame for modular masonry construction.**

3.3 ADJUST AND CLEAN

- A. Check and re-adjust operating finish hardware items in hollow metal work just prior to final inspection. Leave work in complete and proper condition.
- B. Immediately after erection, sand smooth any damaged areas of primer paint and touch up with compatible primer.

END OF SECTION

SECTION 08211 – PRE-FINISHED SOLID WOOD INTERIOR DOORS

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 WORK INCLUDED

- A. Furnish all items shown on drawings and as specified including, but not limited to, the following pre-finished solid wood interior doors.
- B. Standards for manufacturing, machining, finishing, and installation of wood doors unless more specifically described under another section.

1.2 RELATED WORK IN OTHER SECTIONS

- A. Section 06200: Carpentry
- B. Section 08100: Hollow Metal Frames
- C. Section 08700: Finish Hardware
- D. Section 08800: Glass & Glazing

1.3 QUALITY ASSURANCES

- A. Provide doors meeting or exceeding the minimum standards as set forth by the following organizations unless standards are modified or exceeded by this specification.
 - 1. WDMA IS 1A-Window and Door Manufacturers Association
 - 2. National Fire Protection Association (NFPA).
- B. All doors shall be the product of the same manufacturer to insure uniformity of quality and appearance throughout the project.
- C. Fire doors shall bear labels approved by Underwriters Laboratories, Inc or Intertek Testing (WHI). Any discrepancies between the architectural drawings and the procedures and limitations as set forth by the testing agencies shall be brought to the architect's attention.
- D. Provide each fire rated door with a label permanently attached to either the hinge stile or to the top rail, showing testing agency approval for classification scheduled.
- E. The top of each door shall bear a label from the manufacturer indicating the door construction, face veneer species, cut and grade. If the doors are factory finished the label shall also have the finishing information.
- F. The Door Manufacturer shall provide a letter, signed by an authorized company representative, to the Architect stating that the doors have been manufactured in compliance with this specification.

1.4 SUBMITTALS

- A. Shop Drawings
Submit schedules and elevations indicating door sizes, construction, swing, label, undercut, and applicable hardware locations.

Dimensions and detail openings for glass lites, louvers, and grilles.
- B. Samples
If doors are to be factory finished, manufacturer shall submit veneer samples of specified veneer with their standard finish colors at architect's request, or a color sample from the architect will be sent to the manufacturer for duplication. Samples are to be submitted representing the color selected on veneer typical of grain patterns and coloration for the specified specie and cut.
- C. Product Information
Submit manufacturer's product description showing compliance with specifications, along with finishing instructions, installation instructions, and any general recommendations manufacturer may have for the care and maintenance of each door type.

1.5 COORDINATION

Contractor shall be responsible for coordination and acquiring of all necessary information from hardware and metal frame manufacturers. Door manufacturer shall be responsible for coordinating all necessary information received by Contractor from hardware and metal frame manufacturers, in order that doors shall be properly prepared to receive hinges and hardware. Contractor shall provide his supplier with two copies of approved frame schedule, two copies of hardware schedule, and all necessary hardware templates. All the above information shall be in the possession of door supplier 120 days prior to desired delivery date of doors.

1.6 DELIVERY, SOTRAGE, AND HANDLING

- A. No doors shall be delivered to the building until weatherproof storage space is available. Store doors in a space having controlled temperature and humidity range between 30 and 60 percent. Stack doors flat and off the floor, supported to prevent warpage. Protect doors from damage and direct exposure to sunlight.
- B. Factory finished doors shall be individually wrapped in polybags to protect the finish from damage by contact with other doors.
- C. Do not walk or place other material on top of stacked doors. Do not drag doors across one another.
- D. Contractor shall use all means necessary to protect doors from damage prior to, during, and after installation. All damaged doors shall be repaired or replaced by the contractor at no cost to the owner.
- E. Doors shall be palletized at factory in stacks of no more than 30 doors per pallet. Door edges shall be protected with heavy corner guards.

1.7 WARRANTY

- A. All work in this Section shall be warranted by a FULL DOOR WARRANTY (from the date of installation) against defect in materials and workmanship, including the following:
 - 1. Delamination in any degree.
 - 2. Warp or twist of 1/4" or more in any 3'6" x 7'0" section of a door.
 - 3. Telegraphing of any part of core assembly through face to cause surface variation of 1/100" or more in a 3" span.
 - 4. Any defect which may, in any way, impair or affect performance of the door for the purpose which it is intended. Replacement under this warranty shall include hanging, installation of hardware, and finishing.
- B. Periods of warranty after date of installation:
 - 1. Interior solid core and mineral core Life of original installation.
- C. Doors must be stored, finished, hung and maintained per manufacturers recommendations set forth in their Full Door Warranty.

PART 2: PRODUCTS

2.1 MANUFACTURERS

Listed manufacturers are believed to conform to the criteria stated for material quality standards, function and appearance. Manufacturers are still subject to meeting the requirements for 5-ply hot-pressed (cold-pressed will not be accepted) door construction procedures and warranties set forth in this specification. Provide products by one of the following:

- 1. Marshfield
- 2. Eggers Hardwood Products Corporation
- 3. Oshkosh Architectural Door Company
- 4. Mohawk

2.2 MATERIAL AND COMPONENTS

All stile and rail dimensions given are minimum sizes allowed after trimming to book size or factory prefitting.

A. Cores

Particleboard Core -

Shall conform to ANSI A208.1 LD-2 32lb. density core. Stiles shall be 1" minimum laminated hardwood or structural composite lumber (SCL) veneered over with veneer matching face veneer. Rails will be 1 1/8" minimum mill option hardwood or structural composite lumber (SCL). Stiles and rails shall be securely bonded to the core then abrasively planed as an assembly before veneering.

Mineral Core -

Shall be asbestos free, noncombustible mineral composite with a minimum of 28 pounds per cubic foot density when testing in accordance with ASTM C303-82, with 10% maximum absorption by weight with core in equilibrium at 90% relative humidity and 70 degrees

Fahrenheit. Stiles and rails shall be manufacturers standard for specified label. Stile shall be reinforced to receive full mortise hinges. No salt treated components shall be used.

B. Faces and Crossbands

When veneer for transparent or opaque finish is specified, doors shall be 5 ply, made up of 2 face veneers and crossbands, all securely bonded to the core by the hot-press method in one operation, utilizing Type I water proof adhesive. The cold pressing of 2 or 3ply door skins to the core will not be accepted. Face veneers shall have minimum thickness of 1/50 after factory sanding and the individual pieces of veneer forming the face must be edge glued together. Crossbands shall extend the full width of the core assembly. When pairs of doors are scheduled for transparent finish doors shall be pair matched with a continuous grain pattern. When doors are scheduled with transom panels and transparent finish door and transom shall be matched and produced from a continuous sheet of veneer. Bottom rail of transom panel shall extend full width and be same specie as face except for birch, which may have a maple or beech rail.

1. Face veneers shall be of specie, cut and grade specified. Quality shall be governed by industry standards as set forth by ANSI/WDMA IS.1A Series.
 - a) Veneer Grade: "A" Grade
 - b) Veneer Species: Oak
 - c) Veneer Cut: Plain Sliced (Verify – Match Existing)
 - d) Veneer Match: Book matched (Verify – Match Existing)
 - e) Assembly of Veneer on door face: Running Match (Verify – Match Existing)
 2. Cross banding shall be thoroughly dried 1/16 thick hardwood or engineered wood product extending full width and height of door with grain at right angles to face.
 3. Face veneer and crossband shall be pressed to the core in a hot-press with Type I water-proof glue.
- C. View windows non-labeled doors:
1. Furnish manufactures standard flush wood glass stops to be same species as face veneer for transparent doors with the exception of Birch doors which will have hard maple or beech.

2.3 *LABELED FLUSH DOORS 45, 60, AND 90 MINUTE RATED UL10-C POSITIVE PRESSURE CATEGORY A.*

- A. Doors shall be manufactured by the previously specified manufacturers and subject to the requirements of the specifications hereinafter.
- B. Mineral core flush veneered doors, 5-ply shall be made up of face veneers, crossbanding and a core unit all securely bonded together utilizing Type I water-proof adhesive. Manufacture doors where temperature and humidity controls will insure a state of equilibrium between all component parts of doors at all times.

- C. Face Veneer: Same as 2.2-B-1
- D. Crossbanding: Same as 2.2-B-2 and no salt treating allowed.
- E. Core Unit: Manufacturer's noncombustible mineral, monolithic, or in sections tightly fitted and glued. The density shall be minimum 28 lbs. per cubic foot (nominal).
- F. Rails: Top 15/16", bottom 1-7/8" rail (one of two piece) of flame resistant material salt free. Securely glue all rails to core.
- G. Stiles: Manufacturers standard for rating listed.
Stiles shall be bonded to the core and be salt free. Drill 5/32 pilot holes for all hinge screws at the factory prior to shipment for "B" and "C" label fire doors. Stiles must meet the following performance criteria:
 - 1. Split Resistance: Average of ten test samples shall be not less than 800 load pounds when tested in accordance with "Test Method to Determine Split Resistance of Hinge Edges of Composite Type Fire Doors".
 - 2. Direct Screw Withdrawal: Average of ten test samples shall be not less than 650 load pounds when tested for direct screw withdrawal in accordance with ASTM D-1037; using a No. 12 x 1 1/4" steel thread-to-the-head wood screw of the cadmium plated or rust-resistant type.
 - 3. Cycle/Slam: 200,000 cycles with no loose hinge screws or other visible signs of failure when tested in accordance with the requirements of ANSI A151.1, Section 2.5 (Note: Specific data regarding WHI listing features and mechanical test results shall be made available by the manufacturer upon request.)
- H. Blocking: All 45, 60, and 90 min. fire doors shall be supplied with salt free non-combustible internal solid blocking. Blocking shall be arranged in the door so that surface mounted hardware such as but not limited to closers, exit device, etc. May be secured to the door without a need for through bolts. A lock block, minimum size 5 x 10 shall be supplied for each bored, mortised or unit lock scheduled.
- I. Metal vision frames for door lites. Frames shall equal, UL or Intertek approved.
Metal vision frames to be primed for field painting
- J. Door manufacturer shall furnish metal edges only on pairs of fire doors with two surface mounted vertical rod exit devices. All other pairs will be furnished with metal edges and overlapping astragal.
Metal edges and astragals to be primed for field painting.
- K. Labeled doors shall be manufactured to the required size so as to provide proper clearances without field trimming. This procedure shall be followed so as to assure the full thickness of the edge bands.

- L. Doors shall be suitable for hanging on full mortised butt hinges using No. 12 x 1 1/4" steel threaded-to-the-head wood screws of the cadmium plated or rust resistant type. Coordinate with Hardware Section 08700 and 06200 for proper screws and installation. Half-surface hinges are not acceptable.

PART 3: EXECUTION

3.1 FABRICATION

- A. Fabricate all wood doors in strict accordance with the referenced standards specified herein.

3.2 MACHINING AND FITTING

All wood doors shall be machined by the manufacturer for cutouts, hinges, locks and all hardware requiring routing and mortising. Any required rabbeting to properly hang doors will be performed by the manufacturer prior to finishing. Doors shall be sized to allow 1/8" clearance at top and each side, and 3/4" at bottom (unless specified otherwise.) Factory drilling of pilot holes is not required except for "B" & "C" label fire doors at mortise hinge locations.

3.3 INSTALLATION OF HARDWARE

- A. Contractor shall install hardware according to approved hardware schedule for proper locations.
- B. Install with full-threaded wood screws furnished by hardware manufacturer.
- C. Drill proper size pilot hole for all screws. (Full mortise hinges require 5/32" pilot holes.)
- D. Securely anchor hardware in correct position and alignment.
- E. Adjust hardware and door for proper function and smooth operation, proper latching, without force or excessive clearance.

3.4 INSTALLATION OF FIRE DOORS

Fire rated doors shall be installed in accordance with the requirements of the labeling agency and NFPA #80 and #101.

3.5 FACTORY FINISHING

Transparent Finish -

WDMA system TR6 catalyzed polyurethane finish for open grain finish. The sheen shall be satin of semi-gloss. Stain, if required, to be selected from manufacturers standard colors or custom matched to Architects sample. Doors to be individually enclosed in a polybag.

3.6 **FACTORY GLAZING**

3.7 All doors with vision kits to be factory glazed.

END OF SECTION

SECTION 08600 - EXTERIOR WINDOWS

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 SCOPE

Work includes providing and installation of all exterior windows and hardware on the project.

1.2 SUBMITTALS

- A. Submit manufacturer's product literature and installation instructions for type of exterior windows required.
- B. Submit data showing physical properties of the exterior windows along with the hardware and installation instructions.

1.3 QUALITY ASSURANCE

- A. Installer: To be a regularly engaged in the installation of window units specified and shall have proper experience to install the work specified.
- B. Manufacturer: The manufacturer shall be a company regularly engaged in the manufacturer of window units specified.

PART 2: MATERIAL

2.1 MATERIALS

- A. Window units shall be as stated on the drawings.

PART 3: EXECUTION

3.1 INSTALLATION

All products to be installed in strict accordance with the manufacturer's installation specifications. Where brick or concrete block is laid against an exterior window, back-up rods of thickness required by the manufacturer of the windows shall be used to obtain clearances around window unit. In load bearing wood construction, clearances shall be 1/8" on sides, 1/4 at head, and 3/8" at sill. Provide and install caulking on the exterior and interior as required on all units.

3.2 TRAINING

Where special training is required, the installer shall be trained in accordance with the manufacturer's training program and shall be experienced in the installation of such work.

END OF SECTION

SECTION 08710 - DOOR HARDWARE

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 SCOPE

Furnish all hardware as scheduled on the drawings and in this specification for a complete job. Provide additional hardware as required and not necessarily shown on the drawings to have a complete and operating job.

PART 2: PRODUCTS

All new hardware shall be Grade 1.

Match existing hardware style and function as indicated on the drawings.

PART 3: EXECUTION

3.1 INSTALLATION

Install all materials in strict accordance with the mfg. recommendations.

END OF SECTION

SECTION 08800 - GLASS & GLAZING

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 SCOPE

Furnish and install all plastic and glass and all glazing accessories indicated on the drawings and specified herein.

The sizes of all glass shall be verified by measurements taken at the building.

PART 2: MATERIALS

2.1 TYPE OF GLASS

- A. Insulating Glass: All insulating glass shall be units consisting of two lights of glass, Separated by a steel spacer filled with moisture absorbing desiccate. The units shall be hermetically sealed with a primary butyl rubber sealant a minimum of 1/4" wide on the spacer bearing surfaces with a secondary butyl rubber sealant completely covering the unit's edge. All four unit edges are to be maintained under compression by an edge protecting stainless steel channel. All such units shall carry a 20-year warranty and be glazed in accordance with manufacturers installation and Glazing Recommendations.

Type of glass and thickness of units shall be indicated on drawings.

Quality of glass for fabricating all above shall meet requirements of Fed. Spec. DD-G-451C.

2.2 ACCESSORIES

Furnish all required accessory and specialty items required to complete the glass installation such as shims, setting blocks, glazing beads. All such items shall be vinyl or neoprene.

- A. Glazing Compound: Conforming to Fed. Spec. TT-P-781a, Type I, color to match adjoining finish.
- B. Glazing Tape: Synthetic butyl rubber base reinforced with nylon fiber.
- C. Glazing Channels: Neoprene extruded sections.
- D. Gaskets: Neoprene material - ASTM C-542-65T.

Manufacturers shall be -Dicks-Armstrong Pontius, Concord, Pecora, Plastic Products, T.H. Maloney Co., Pawling Rubber Co., or approved equal.

2.3 *SAMPLES*

Provide one 12" x 12" samples of each type of glass to be used to the Engineer for approval.

PART 3: INSTALLATION

All glass shall be set by skilled glazers in strict accordance with the Flat Glass Jobbers Association Glazing Manual and frame manufacturer's recommendations.

All windows to be inside, bead glazed. Prime door rabbets before setting glass. Furnish all glazing clips, setting blocks and accessories. Metal glazing beads to be provided by frame manufacturer.

Remove and reset glazing beads to avoid marking or defacing of rebate, bead or setting screws. See that unit is clean and dry before starting work. Do not glaze when ambient temperature is below 40 degrees F.

Use plastic or Neoprene setting blocks at 1/4 points of glass or as required by manufacturer for all large sheets. Actual size of glass for installation must be measured at job, and contractor shall assume responsibility for same.

Apply thin layer of compound to rebate, set glass in compound, pressing until even bed is secured. Run layer of face compound, apply beads or stops and remove excess. Bed glass in compound so space between glass and adjoining metal is well filled and neatly tooled.

All interior glass panels in metal frames shall be installed, using either glazing tape or glazing pound.

Installation of glass with neoprene glazing gaskets shall be in accordance with manufacturers printed directions. All corners and joints of gaskets shall be injection molded and each corner shall incorporate the Secondary Lip Seal to provide water tightness. Filler strip shall be job-site molded and shall be 1/4" longer than gasket length to allow for installation of strip under compression. Gaskets shall carry the manufacturers five year guarantee.

3.1 *COMPLETION OF WORK*

Remove all rubbish and surplus materials resulting from this work.

3.2 *CERTIFICATION*

Labeling of glass shall be as directed by all enforceable codes.

3.3 *CLEANING*

At completion of work, the contractor shall carefully remove all excess glazing compound and point up any defects in his work, and shall have glass washed both sides to the satisfaction of the Engineers.

END OF SECITON

SECTION 08900 – ALUMINUM FRAMED STOREFRONTS & WINDOWS

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.01 Summary

A. Section Includes: Kawneer Architectural Aluminum Storefront Systems, including perimeter trims, stools, accessories, shims and anchors, and perimeter sealing of storefront units.

1. Types of Kawneer Aluminum Storefront Systems include:

- a. Trifab® VG 451T Storefront System – 2" x 4-1/2" (50.8 x 114.3) nominal dimension; Thermal; Front, Center, Back, Multi-Plane, Structural Silicone or Weatherseal Glazed (Type B); Screw Spline, Shear Block, Stick or Punched Opening Fabrication.

B. Related Sections:

1. Division 08800 Glass and Glazing

1.02 System Description

Provide and install new window units as shown on the drawings.

A. Storefront System Performance Requirements:

1. Wind loads: Provide storefront system; include anchorage, capable of withstanding wind load design pressures according to the 2006 International Building Code as adopted by the State of Indiana
2. Air Infiltration: The test specimen shall be tested in accordance with ASTM E 283. Air Infiltration rate shall not exceed 0.06 cfm/ft² (0.3 l/s • m²) at a static air pressure differential of 6.24 psf (300 Pa).
3. Water Resistance: The test specimen shall be tested in accordance with ASTM E 331. There shall be no leakage at a minimum static air pressure differential of 8 psf (383 Pa) as defined in AAMA 501.
4. Uniform Load: A static air design load of 20 psf (958 Pa) shall be applied in the positive and negative direction in accordance with ASTM E 330. There shall be no deflection in excess of L/175 of the span of any framing member. At a structural test load equal to 1.5 times the specified design load, no glass breakage or permanent set in the framing members in excess of 0.2% of their clear spans shall occur.
5. Thermal Transmittance (U-factor): When tested to AAMA Specification 1503, the thermal transmittance (U-factor) shall not be more than:
 - a. Glass to Exterior – 0.47 (low-e) or 0.61 (clear)
 - b. Glass to Center – 0.44 (low-e) or 0.61 (clear)
 - c. Glass to Interior – 0.41 (low-e) or 0.56 (clear)
6. Condensation Resistance (CRF): When tested to AAMA Specification 1503, the condensation resistance factor shall not be less than:
 - a. Glass to Exterior – 70_{frame} and 69_{glass} (low-e) or 69_{frame} and 58_{glass} (clear).
 - b. Glass to Center – 62_{frame} and 68_{glass} (low-e) or 63_{frame} and 56_{glass} (clear).
 - c. Glass to Interior – 56_{frame} and 67_{glass} (low-e) or 54_{frame} and 58_{glass} (clear).
7. Sound Transmission Class (STC) and Outdoor-Indoor Transmission Class (OITC): When tested to AAMA Specification 1801 and in accordance with ASTM E1425 and ASTM E90, the STC and OITC Rating shall not be less than:
 - a. Glass to Exterior – 38 (STC) and 31 (OITC)
 - b. Glass to Center – 37 (STC) and 30 (OITC)
 - c. Glass to Interior – 38 (STC) and 30 (OITC)

1.03 Submittals

- A. General: Prepare, review, approve, and submit specified submittals in accordance with "Conditions of the Contract" and Submittals Sections. Product data, shop drawings, samples, and similar submittals are defined in "Conditions of the Contract."
- B. Quality Assurance/Control Submittals:
 - 1. Test Reports: Submit certified test reports showing compliance with specified performance characteristics.

1.04 Warranty

- A. Project Warranty: Refer to "Conditions of the Contract" for project warranty provisions.
- B. Manufacturer's Product Warranty: Submit, for Owner's acceptance, manufacturer's warranty for storefront system as follows:
 - 1. Warranty Period: Two (2) years from Date of Substantial Completion of the project provided however that the Limited Warranty shall begin in no event later than six months from date of shipment by supplier.

1.05 Quality Assurance

- A. Qualifications:
 - 1. Installer Qualifications: Installer experienced (as determined by contractor) to perform work of this section who has specialized in the installation of work similar to that required for this project and who is acceptable to product manufacturer.
 - 2. Manufacturer Qualifications: Manufacturer capable of providing structural calculations, applicable independent product test reports, installation instructions, a review of the application method, customer approval and periodic field service representation during construction.
- B. Pre-Installation Meetings: Conduct pre-installation meeting to verify project requirements, substrate conditions, manufacturer's installation instructions, and manufacturer's warranty requirements.

1.06 Delivery, Storage, and Handling

- A. Ordering: Comply with manufacturer's ordering instructions and lead-time requirements to avoid construction delays.
- B. Packing, Shipping, Handling and Unloading: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- C. Storage and Protection: Store materials protected from exposure to harmful weather conditions. Handle storefront material and components to avoid damage. Protect storefront material against damage from elements, construction activities, and other hazards before, during and after storefront installation.

PART 2 - PRODUCTS

2.01 Manufacturers

- A. Acceptable Manufacturers:
 - 1. Kawneer Company, Inc.
555 Guthridge Court,
Technology Park/Atlanta,
Norcross, GA 30092
Telephone: 770 449 5555
Fax: 770 734 1560

C. Substitutions:

1. General: Refer to Substitutions Section for procedures and submission requirements.
 - a. Pre-Contract (Bidding Period) Substitutions: Submit written requests seven (7) days prior to bid date.
2. Substitution Documentation
 - a. Product Literature and Drawings: Submit product literature and drawings modified to suit specific project requirements and job conditions.
 - b. Certificates: Submit certificate(s) certifying substitute manufacturer (1) attesting to adherence to specification requirements for storefront system performance criteria, and (2) has been engaged in the design, manufacture and fabrication of aluminum storefront for a period of not less than ten (10) years.
3. Substitution Acceptance: Acceptance will be in written form as an addendum prior to the bid opening.

2.02 Materials

- A. Aluminum (Framing and Components):
1. Material Standard: ASTM B 221; 6063-T6 alloy and temper
 2. Member Wall Thickness: Each framing member shall provide structural strength to meet specified performance requirements.
 3. Tolerances: Reference to tolerances for wall thickness and other cross-sectional dimensions of storefront members are nominal and in compliance with AA Aluminum Standards and Data.

2.03 Accessories

- A. Fasteners: Where exposed, shall be Stainless Steel.
- B. Gaskets: Glazing gaskets shall be extruded EPDM rubber.
- C. Perimeter Anchors: Aluminum. When steel anchors are used, provide insulation between steel material and aluminum material to prevent galvanic action.
- D. Thermal Barrier (Trifab[®] VG 451T):
1. Kawneer IsoLock[®] Thermal Break with a 1/4" (6.4) separation consisting of a two-part chemically curing, high-density polyurethane, which is mechanically and adhesively joined to aluminum storefront sections.
 - a. Thermal Break shall be designed in accordance with AAMA TIR-A8 and tested in accordance with AAMA 505.

2.04 Related Materials

- A. Sealants: Refer to Joint Treatment (Sealants) Section.
- B. Glass: Refer to Glass and Glazing Section.

2.05 Fabrication

- A. General:
1. Fabricate components per manufacturer's installation instructions and with minimum clearances and shim spacing around perimeter of assembly, yet enabling installation and dynamic movement of perimeter seal.
 2. Accurately fit and secure joints and corners. Make joints flush, hairline and weatherproof.
 3. Prepare components to receive anchor devices. Fabricate anchors.
 4. Arrange fasteners and attachments to conceal from view.

- 2.06 Finishes
 - A. Factory Finishing:
 - 1. Kawneer Permanodic® AA-M12C22A44, AAMA 611, Architectural Class I Color Anodic Coating. Color selected by Owner.
- 2.07 Source Quality Control
 - A. Source Quality: Provide aluminum storefront specified herein from a single source.
 - 1. Building Enclosure System: When aluminum storefront is part of a building enclosure system, including entrances, entrance hardware, windows, curtain wall system and related products, provide building enclosure system products from a single source manufacturer.
 - B. Fabrication Tolerances: Fabricate aluminum storefront in accordance with framing manufacturer's prescribed tolerances.

PART 3 – EXECUTION

- 3.01 Examination
 - A. Site Verification of Conditions: Verify substrate conditions (which have been previously installed under other sections) are acceptable for product installation in accordance with manufacturer's instructions. Verify openings are sized to receive storefront system and sill plate is level in accordance with manufacturer's acceptable tolerances.
 - 1. Field Measurements: Verify actual measurements/openings by field measurements before fabrication; show recorded measurements on shop drawings. Coordinate field measurements, fabrication schedule with construction progress to avoid construction delays.
- 3.02 Installation
 - A. General: Install framing system in accordance with manufacturer's instructions and AAMA storefront and entrance guide specifications manual.
 - 1. Dissimilar Materials: Provide separation of aluminum materials from sources of corrosion or electrolytic action contact points.
 - 2. Weathertight Construction: Install sill members and other members in a bed of sealant or with joint filler or gaskets, to provide weathertight construction. Coordinate installation with wall flashings and other components of construction.
 - 3. Attach to structure to permit sufficient adjustment to accommodate construction tolerances and other irregularities.
 - 4. Provide alignment attachments and shims to permanently fasten system to building structure.
 - 5. Align assembly plumb and level, free of warp and twist. Maintain assembly dimensional tolerances aligning with adjacent work.
 - B. Related Products Installation Requirements:
 - 1. Sealants (Perimeter): Refer to Joint Treatment (Sealants) Section.
 - 2. Glass: Refer to Glass and Glazing Section.
 - a. Reference: ANSI Z97.1, CPSC 16 CFR 1201 and GANA Glazing Manual.

3.03 Field Quality Control

- A. Field Tests: Architect shall select storefront units to be tested as soon as a representative portion of the project has been installed, glazed, perimeter caulked and cured. Conduct tests for air infiltration and water penetration with manufacturer's representative present. Tests not meeting specified performance requirements and units having deficiencies shall be corrected as part of the contract amount.
 - 1. Testing: Testing shall be performed by a qualified independent testing agency. Refer to Testing Section for payment of testing and testing requirements. Testing Standard per AAMA 503, including reference to ASTM E 783 for Air Infiltration Test and ASTM E 1105 Water Infiltration Test.
 - a. Air Infiltration Tests: Conduct tests in accordance with ASTM E 783. Allowable air infiltration shall not exceed 1.5 times the amount indicated in the performance requirements or 0.09 cfm/ft², whichever is greater.
 - b. Water Infiltration Tests: Conduct tests in accordance with ASTM E 1105. No uncontrolled water leakage is permitted when tested at a static test pressure of two-thirds the specified water penetration pressure but not less than 6.24 psf (300 Pa).
- B. Manufacturer's Field Services: Upon Owner's written request, provide periodic site visit by manufacturer's field service representative.

3.04 Protection and Cleaning

- A. Protection: Protect installed product's finish surfaces from damage during construction. Protect aluminum storefront system from damage from grinding and polishing compounds, plaster, lime, acid, cement, or other harmful contaminants.
- B. Cleaning: Repair or replace damaged installed products. Clean installed products in accordance with manufacturer's instructions prior to owner's acceptance. Remove construction debris from project site and legally dispose of debris.

END OF SECTION

SECTION 09250 - GYPSUM WALLBOARD SYSTEMS

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 SCOPE

Furnish labor, materials, equipment special tools, supervision and services to complete Gypsum Wallboard Systems indicated, noted, and detailed on drawings and specified herein, including wallboard and accessories.

1.2 RELATED WORK SPECIFIED ELSEWHERE

Section 8110 Hollow Metal Frames
Section 9900 Painting

1.3 INDUSTRY STANDARDS

A. Publications of the following institutes, associations, societies, and agencies are referred to in this Section.

1. American Society for Testing and Materials, ASTM.
2. Underwriters' Laboratories, Inc., UL.
3. Federal Specifications, FS.

1.4 PRODUCT HANDLING

A. Gypsum Wallboard materials shall be delivered and stored to prevent damage.
1. Storage area shall be dry, weather-tight, and well ventilated.

1.5 PRODUCT HANDLING

Uniform temperature in the range of 55 degrees to 70 degrees shall be maintained during the installation and finishing of Gypsum Wallboard Systems.

1.6 QUALITY ASSURANCE

A. Acceptable Manufacturer's and Products.
1. United States Gypsum Company.
2. National Gypsum Company.
3. Georgia-Pacific Gypsum Company.

PART 2: PRODUCTS

2.1 MATERIALS

A. Materials shall conform to the following requirements of the 2006 International Building Code as adopted by the State of Indiana.

B. Gypsum Wallboard, unless otherwise specified shall be the following types, shall be:

1. Regular Board, taper edge, furnished 5/8" thick.
2. Fire Rated Board, taper edge, furnished 5/8" thick.
3. Moisture Resistant Board, taper edge furnished 5/8" thick.
4. Wallboard shall be thickness indicated furnished in stock widths and stock lengths.

- C. Accessories, including corner beads, casing beads and trim, shall be furnished by the wallboard manufacturer as standard for the installed systems. Corner beads shall be screwed to wall, no crimp type.
- D. Fasteners shall be Type S, Bulge Head wallboard screws at lengths required by mfg. Nails shall not be used.

2.2 *EXAMINATION*

- A. Examine areas that are to receive drywall application.
 - 1. Check alignment of supports, spacing, size and report any unsatisfactory conditions to the Engineer. Do not proceed with drywall application until conditions have been corrected.
- B. Wallboard system shall be fastened to steel framing using power driven screws.
 - 1. Screws shall be spaced not less than 3/8" from edges and ends of wallboard, and shall be spaced 8" o.c. at joints and field.
 - 2. Joints in wallboard shall occur only at stud locations

PART 3: EXECUTION

3.1 *INSTALLATION*

- A. Drywall systems shall be complete, including supports, wallboard, and taping and spackling joints.
- B. Floor and ceiling tracks shall be channel shape cold formed of galvanized sheet steel of sufficient width to receive studs.
- C. Studs shall be spaced as shown on the drawings.
- D. Wallboard shall be taper edge boards installed with long dimension vertical. Install ceiling first.
 - 1. Fire Rated Boards shall be used for all walls indicated on the drawings as smoke or fire walls or as otherwise noted on the drawings.
 - 2. Moisture Resistant Wallboard shall be used in damp or wet areas.
 - 3. Moisture resistant wallboard shall be used for all walls to receive ceramic tile.
- E. Provide corner at all outside corners, heads of unframed openings and other unprotected outside corners. Crimp type of metal corners shall not be used unless screwed also.

3.2 *JOINT TREATMENT*

- A. All joints and internal corners shall be finished with joint tape and spackle as recommended by the wallboard manufacturer.
 - 1. Apply joint compound sufficiently thick to hide board surface at angles and joints. Cover nail heads and depressions with compound.
 - 2. Apply tape to angles and joints, squeeze out excess compound, and cover tape with compound.

When first coat has thoroughly dried, apply second coat and taper beyond edges of first coat. Apply thin-finish coat of compound tapered beyond edges of second coat and sand

to smooth surface, true to a plane.

3.3 *CLEANING*

Remove soil, stain, caused by installing of drywall materials. Clean and properly prepare drywall surfaces to receive finish, as specified.

END OF SECITON

SECTION 09400 – SHEET VINYL FLOORING
ALLOWANCE ITEM

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 SCOPE

Furnish and install all sheet vinyl flooring indicated, noted, detailed or scheduled on the drawings and specified herein, complete.

PART 2: PRODUCTS

Refer to “Section 1030 Allowances” for more information.

PART 3: EXECUTION

3.1 INSTALLATION

Install all materials in strict accordance with the mfg. recommendations.

END OF SECTION

SECTION 09500 - ACOUSTICAL CEILING PANELS

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 SCOPE

The work of this section comprises the furnishing of all labor, materials, equipment, and services necessary for the installation of all acoustical ceilings, complete with suspension systems and related accessories as shown or scheduled on the drawings as specified herein.

1.2 EXPOSED GRID SYSTEM

System consists of suspension system to form an exposed metal grid pattern and lay-in acoustic control panels. All component parts shall be Underwriter's Laboratories, Inc., approved and rated materials for at least a one (1) hour rating where required.

Provide framing required for ceiling access for mechanical equipment. Provide additional hangers required to support ceiling mounted equipment, light fixtures, etc. Provide tie downs to prevent uplift of lay-in units.

1.3 WORK NOT INCLUDED

The following work is specified under other sections of the specifications as noted.

- A. Furnishing and installation of all lighting fixtures and wiring to same are specified in Division 16.
- B. Furnishing and installation of all ducts, ceiling grilles, return registers in connection with Heating & Air Conditioning are specified in Division 15.

PART 2: MATERIALS

2.1 EXPOSED SUSPENSION SYSTEM

- A. Donn DX exposed grid system. White in color.
 - 1. Hangers: shall be not less than 12 gauge soft annealed galvanized.
 - 2. Angle moldings shall be nominal 1" x 1" fabricated from cold formed steel.
 - 3. All steel formed parts shall be electro-galvanized and shall receive a shop applied finish of baked enamel,.
- B. Donn AX exposed grid all aluminum system in the Lower Level Mens and Womens Restrooms only. White in color.
 - 1. Hangers: 3'-0 o.c. as directed by the mfg.
 - 2. Angle moldings shall be nominal 1" x 1" fabricated from cold formed aluminum.
 - 3. All aluminum formed parts shall receive a shop applied finish of baked enamel.

2.2 ACOUSTIC PANELS

- A. To be used in Lower Level Mens Restroom, Lower Level Womens Restroom, Lower Level Corridor, Dormitory Restrooms, and Storage Rooms.
USG Radar ClimaPlus #2410 2'-0" x 2'-0" x 5/8" panels with "SQ" edge.
- B. To be used in all remaining areas not stated above.
USG Eclipse ClimaPlus #76775 2'-0" x 2'-0" x 3/4" panels with "SLT" edge.

2.3 SAMPLES

Submit to the Engineer for his approval samples of each type, style and size of acoustical units and suspension systems.

2.4 SHOP DRAWINGS

Provided shop drawings in the form of schedules showings type, style, size and method of suspension to be used in each area receiving acoustical treatment.

PART 3: EXECUTION

3.1 INSTALLATION

The suspension system shall support the ceiling assembly with a maximum deflection of 1/360 of the span. Seismic bracing as required by enforceable building codes. See Section 01000 Governing Codes for list of Codes to be used on this project.

Install hold down clips in all vestibule areas/rooms.

Suspend main beams not more than 48" center to center with hanger wire tied securely and accurately leveled. Extra hangers shall be provided at light fixtures that are supported by grid system and at wall.

Main beams (tees) shall be spaced 4'-0" on center, with cross tees at 2'-0" on center to form a 4'-0" x 2'-0" grid module. Cross tees shall intersect and be positively locked into the main tees. Main tees shall be locked end to end. Tile board hold down clips shall be used as required. Wall moldings shall be securely fastened to walls, with main tees and cross tees resting on wall moldings.

END OF SECTION

SECTION 09650 - VINYL COMPOSITION TILE

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 SCOPE

Furnish and install all resilient tile and sheet flooring indicated, noted, detailed or scheduled on the drawings and specified herein, complete with vinyl base.

1.2 DESCRIPTION OF WORK

A. Extent of resilient flooring and accessories is shown on the drawings and in schedules and includes:

1. Vinyl Composition Tile.
2. Rubber Base.

1.3 QUALITY ASSURANCE

- A. Manufacturer: Provide each type of resilient flooring and accessories as produced by a single manufacturer, including recommended primers, adhesives, sealants, and leveling compounds.
- B. Fire Test Performance: Provide resilient flooring which complies with the following fire test performance criteria as determined by an independent testing laboratory acceptable to authorities having jurisdiction.

1.4 SUBMITTALS

- A. Product Data: Submit manufacturer's technical data for each type of resilient flooring and accessory.

PART 2: PRODUCTS

2.1 ACCEPTABLE MANUFACTURES

- A. Manufacturer: Subject to compliance with requirements, provide products of one of the following, or equal.
1. Vinyl Composition Tile
 - a. Armstrong Commercial Flooring
 2. Rubber Wall Base
 - a. Armstrong Commercial Flooring
 - b. Johnsonite

2.2 MATERIALS:

- A. Provide color and patterns as selected by the Interior Designer.
Refer to Drawings.
- B. Vinyl Composition Tile Armstrong Luxury VCT Premium Excelon Raffia Stream
With D10 Finish.
- C. Rubber Wall Base:
 - 1. Carpet Tile Areas.
Johnsonite 6" Vinyl Base Tight Lock.
Refer to Drawings.
 - 2. VCT and Epoxy Flooring Areas
Provide rubber base complying with ASTM 1861-98.
With matching end shops and preformed or molded corner units.
 - 1. Height: 4" (6" at locations stated on the drawings)
 - 2. Thickness: 1/8"
 - 3. Style: Standard top-set cove, and straight as indicated.
 - 4. Finish: Matte.
- D. Divider Strip. Provide and install divider strips at the intersections of flooring and other floor covering as required.
- F. Adhesive. Shall be as manufactured and recommended by the tile manufacturer. For above, below or on grade installation.
- G. Selection. Color and design selection for flooring and bases shall be made by the Engineer from any or all samples in the manufacturers complete line. Provide one complete box of samples of each tile and base available from which selection will be made.
- H. Extra Material. Deliver to the Owner, for use in maintenance work, the following materials, matching that used in the project:
 - a. Vinyl Tile 2 cartons each color
 - b. Vinyl Base 15 lin. ft. each color, ea size

2.3 PRE-INSTALLATION

Store tiles in room where they are to be installed for 24 hours with temperature maintained at 70 deg.

Clean and inspect sub-floors, patch small holes and uneven surfaces with Latex Under-layment applied with a steel trowel.

Test concrete sub-floors for moisture prior to priming.

PART 3: EXECUTION

3.1 INSTALLATION

All tile shall be laid in strict accordance with manufacturers specifications, and shall be laid and cemented with approved waterproof adhesive. Install tile starting at center axis, scribing and fitting neatly at walls, around columns, under cabinets and around door frames.

Install a divider strip at all doors.

Apply Vinyl Tile Bases Continuous to thoroughly dry walls and cabinet bases. Corners shall be field formed, skive front for internal corners and back for external corners. Heat base when forming and hold to corner until set. Apply mastic and set in place.

3.2 *CLEANING*

Contractor shall clean the newly installed VCT tile floor with Armstrong S-485 Commercial Floor Cleaner, install one coat of Armstrong S-495 Commercial Floor Sealer, and two coats of Armstrong S-480 Commercial Floor Polish.

All cleaning, sealing, and polishing shall be done per mfg. standards.

Keep all traffic off finished floors after cleaning. Apply Kraft paper with taped joints as protection to cleaned floors as required.

An electric polishing machine shall be used to apply floor polish.

END OF SECTION

SECTION 09680 – CARPET

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 SCOPE

Work includes providing and installation of all carpet on the project.

1.2 SUBMITTALS

- A. Submit manufacturer's product literature and installation instructions for the specified carpet.
- B. Submit samples showing the physical properties of the carpet for approval.

1.3 QUALITY ASSURANCE

- A. Installer: To be a regularly engaged in the installation of carpet installation and shall have have proper experience to install the work specified.
- B. Manufacturer: The manufacturer shall be a company regularly engaged in the manufacturer of carpet.

PART 2: PRODUCTS

2.1 MATERIALS

- A. Carpet: Carpet shall be Patchcraft Mid Century Pop modular carpet tiles.
Latex concrete floor as required. Floor prep of existing concrete floors as required for manufacturers installation requirements.
- B. The final selection of colors will be by the owner.
Refer to Drawings for more information.

PART 3: INSTALLATION

3.1 ADHESIVES

Adhesives shall be in accordance with the carpet manufacturer's recommendations and specifications. All products to be installed in strict accordance with the manufacturer's installation specifications.

END OF SECITON

SECTION 09705 – DECORATIVE MOSAIC EPOXY COATING SYSTEM

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.01 Work Included

A. Furnish necessary material, labor, and equipment required to prepare designated areas and install a Decorative Mosaic Epoxy Coating System.

1.02 Related Work

A. Drawings and general provisions of contract including General and Special Conditions and Division I, excepting special Submittal and Quality Assurance provisions in this section.

1.03 Quality Assurance

A. Manufacturer's Qualifications

Obtain Decorative Mosaic Epoxy Coating System materials from a single manufacturer with a minimum of 5 years verifiable experience providing materials of the type specified in this section.

B. Contractor's Qualifications

Installation must be performed by a manufacturer approved contractor with skilled mechanics having not less than three(3) satisfactory experience in the installation of the type of system as specified in this section, and must be approved in writing by the manufacturer of the Decorative Mosaic Epoxy Coating System.

C. Floor System Thickness Verification

At the owner's discretion and under his supervision the contractor shall take 3 1" random cores per 1,000 sq. ft. through the system into the substrate to verify proper system thickness. Cored areas less than specified thickness shall be removed and replaced or increased in thickness by the installing contractor, in a manner that does not affect the performance or integrity of the system. Cored areas which comply with the recommended system thickness shall be built-up to match the surrounding surface elevation prior to applying the seal coat(s). Cores taken and patched will be noticeable; therefore, cores should be taken from areas where aesthetics are less critical. Cost associate with repair of cored areas that comply with specification thickness are the responsibility of the owner.

1.04 Warranty

A. The contractor and the manufacturer shall furnish a standard guarantee of the Decorative Mosaic Epoxy Coating System for a period of one year after installation. The labor and material guarantee shall include loss of bond and wear-through to the concrete substrate from normal use.

B. Not included in the warranty are damage due to structural design deficiencies including but not limited to slab cracking from lateral, vertical or rotational movement, and gouging or other damage due to fork lifts, other equipment, delamination caused by vapor transmission, Acts of God, or other elements beyond the scope of protection of this system nor causes not related to the system materials.

C. In case of a warranty claim, the owner will notify the manufacturer and contractor in writing within 30 days of the first appearance of problems covered under this warranty. The owner will provide free and unencumbered access to the area during normal working hours for warranty

rework. Property protection is also the owner's responsibility. Remedy is limited to direct repair of the Decorative Mosaic Epoxy Coating System.

1.05 Submittal

A. System Data

Submit manufacturer's specifications on cured system and individual components of the Decorative Mosaic Epoxy Coating System, including physical properties and performance properties and tests described in part 2.01 B and submit Material Safety Data Sheets. Each individual component of the system will be evaluated on the basis of these standards. For any tests not listed in the manufacturer's standard nationally published data, the manufacturer must supply the missing data accompanied by the independent testing laboratory's test results which prove compliance in accordance with the referenced standard(s). Furnish 2 sets of this information. Manufacturer's standard color chart shall also be submitted and must afford the owner color selection from at least 10 standard colors and computerized custom color matching shall be available upon request. Furnish 2 sets of this information.

B. The contractor shall submit a 6" x 6" cured system sample which the contractor has made for verification purposes and finish texture approval.

C. Contractor Experience

The contractor shall furnish a list of projects using either specified material or equivalent that they have installed during the last 5 years. Information shall include: project name, square footage, owner contact name with owner's address and phone number. Also, the contractor shall furnish résumés detailing the experience of key project personnel including supervisors and mechanics.

D. It is the intention of this Section to provide the products as named. Substitutions will be considered only when received by the Architect, Engineer or Design Professional through a bidding Prime Contractor at least ten days prior to the date set for receipt of bids. Upon receipt of any such submission, the Architect, Engineer or Design Professional will determine whether or not the proposed product is an equal. In the event the Architect, Engineer or Design Professional determines that a proposed system is an approved equal, he will issue an addendum and notify all bidders at least 48 hours prior to receipt of bids. No substitutions will be considered after contract bid date.

E. The contractor shall submit a copy of the manufacturer's packing slip, tagged for this specific job, along with calculations, signed by an officer of the primary material supplier demonstrating that the quantity of material furnished for the project will achieve the specified coverage and mil thickness.

1.06 Material Delivery, Handling and Storage

A. Primary system materials shall be delivered in the manufacturer's undamaged, unopened containers. Each container shall be clearly marked with the following:

- Product name(s) and/or Number(s)
- Manufacturer's name
- Component designation (A, B, etc.)
- Product Mix Ratio
- Health and Safety Information
- CHEMTREC Emergency Response Information

B. Provide equipment and personnel to handle the materials by methods which prevent damage.

C. The contractor shall promptly inspect direct jobsite material deliveries to assure that quantities are correct, comply with requirements and are not damaged.

D. The contractor shall be responsible for materials furnished by him, and he shall replace, at his own expense, such materials that are found to be defective in manufacture or that have become damaged in transit, handling or storage.

E. Store material(s) in accordance with manufacturer's instructions, with seals and labels intact and legible. Maintain temperatures within the required range. Do not use materials which exceed the manufacturer's maximum recommended shelf life.

1.07 Job Conditions

A. The contractor shall visit the jobsite prior to the installation of the Decorative Mosaic Epoxy Coating System to evaluate substrate condition, including substrate moisture transmission, quantity and severity of cracking, and the extent of repairs needed. Substrate imperfections should be repaired only after mechanical preparation of the substrate. Surface preparation reveals most imperfections requiring repair. Concrete substrates shall be tested to verify that the moisture vapor transmission of the substrate does not exceed the Decorative Mosaic Epoxy Coating System manufacturers' recommendations. Cost associated with repair, leveling and remediation of the substrate are the responsibility of the provider of the substrate.

B. The contractor should exercise care during surface preparation and system installation to protect surrounding substrates and surfaces, as well as in-place equipment. The contractor shall prepare the substrate to remove laitance and open the surface. This shall be achieved by light brush grit blasting. Surface profile achieved shall be similar to medium grit sandpaper and free from bond-inhibiting contaminants. Costs incurred that are associated with damage from negligence or inadequate protection shall be the sole responsibility of the contractor.

C. Sub floor tolerances in accordance with ACI 302. Each drain in the installation area must be working and raised or lowered to the actual finished elevation of the Decorative Mosaic Epoxy Coating System.

D. System must be protected by the General Contractor or, as a separate bid item, by the installing contractor until it is inspected and turned over to the owner.

E. The minimum slab temperature must be conditioned to 60 degrees F before commencing installation, during installation, and for at least 72 hours after installation is complete. The substrate temperature must be at least 5 degrees F above the dew point during installation.

F. Maintain lighting at a minimum uniform level of 50 or more foot candles in areas where the Decorative Mosaic Epoxy Coating System is being installed. It is the recommendation of the manufacturer that the permanent lighting be in place and working during the installation.

G. Leaks from pipes and other sources must be corrected prior to the installation of the Decorative Mosaic Epoxy Coating System.

Part 2 - Products

2.01 Materials

A. System Overview

The General Polymers Decorative Mosaic Epoxy Coating System as manufactured by Sherwin-Williams consists of 3579 Standard Primer, 3745 Self-Leveling Epoxy as base coat and 6750/6755 Decorative Vinyl Chip Aggregate. Different seal Coat options are as follows:

4638 HS Polyurethane Floor Enamel

3745 Self-Leveling Epoxy

4685 Poly-Cote Urethane

B. Typical Physical Properties

Color	Custom Color Blends Available
Abrasion Resistance ASTM D 4060, CS-17 Wheel, 1,000 cycles	100 mgs lost
Flexural Strength ASTM C 580	10,000 psi
Adhesion ACI 503R	300 psi concrete failure
Flammability	Self-extinguishing over concrete
Impact Resistance MIL-D-3134J	Direct, inch pound greater than 160, passes Reverse, inch pound greater than 80, passes
Resistance Elevated Temperatures MIL-D-3134J	No slip or flow at required temperature of 158°F

Part 3 - Execution

3.01 Surface Preparation

A. For thorough instructions regarding preparation of concrete substrates "Instruction for Concrete Surface Preparation" (Form G-1).

3.02 Installation

A. General

Apply each component of the Decorative Mosaic Epoxy Coating System in compliance with manufacturer's written installation instructions and strictly adhere to mixing and installation methods, recoat windows, cure times and environmental restrictions. The Decorative Mosaic Epoxy Coating System is to be installed directly over non-moving control joints and cracks which have been treated with EPO-FLEX epoxy, and the Decorative Mosaic Epoxy Coating System will terminate at the edge of isolation and expansion joints as designated by the Architect, Engineer or Design Professional. Integral cove base shall be installed where specified in the drawings.

B. Cracks

After preparation, evaluation of quantity and severity of cracks in concrete will determine the needed repairs. Original bid assumes repair and treatment of 100 linear feet of cracks and control joints. Additional treatment is considered excessive and must be bid on a per linear foot basis. For information pertaining to the treatment of cracks in concrete substrates, consult Manufacturer's publication, Concrete 102.

C. Control Joints

Original bid assumes repair and treatment of 100 linear feet of cracks and control joints. Additional treatment is considered excessive and must be bid on a per linear foot basis. For information pertaining to the treatment of control joints in concrete substrates, consult Manufacturer's publication, Concrete 103.

D. Isolation/Expansion and Other Joints Subject to Movement

All expansion joints must be honored through the flooring system. For information pertaining to the above, consult Manufacturer's publication, Concrete 105.

E. System Primer

3579 Standard Primer

F. Base Coat

3745 Self-Leveling Epoxy

G. Chip Broadcast

6750/6755 Decorative Vinyl Chip Aggregate

H. Select Seal Coat

4638 HS Polyurethane Floor Enamel

3745 Self-Leveling Epoxy

4685 Poly-Cote Urethane

3.03 Curing, Cleaning and Protection

A. Cure the Decorative Mosaic Epoxy Coating System materials in compliance with manufacturer's directions, taking care to prevent contamination during stages of the installation and prior to completion of the curing process.

B. Protect the Decorative Mosaic Epoxy Coating System from damage and wear during other phases of the construction operation, using temporary coverings as recommended by the manufacturer, if required. Remove temporary covering just prior to final inspection.

C. Clean the Decorative Mosaic Epoxy Coating System just prior to final inspection, using materials and procedures suitable to the system manufacturer.

D. Some cleaners will affect the color, gloss or texture of your polymer floor surfaces. To determine how your cleaner will perform, first test each cleaner, in a small area, utilizing your cleaning technique. This precaution will demonstrate the effect of your cleaner and technique. If no deleterious effects are observed, continue with the procedure. If deleterious effects do occur, modify the cleaning material and/or procedure. For recommendations regarding types of cleaners, contact the Decorative Mosaic Epoxy Coating System manufacturer.

END OF SECTION

SECTION 09900 - PAINT

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 SCOPE

Furnish all labor and materials required to complete all painting, enameling or finishing, indicated, noted, detailed or scheduled on the drawings and specified herein. It is the intent of this Section to require the painting subcontractor to finish all materials, equipment and items installed by all trades including Mechanical & Electrical. Painting Subcontractor shall also be responsible for the finishing of areas damaged or disturbed during construction time. Factory finished items will not require additional finishing.

PART 2: PRODUCTS

2.1 MATERIALS

This specification will make no attempt to define the composition or physical properties of the paints to be applied.

All paints shall be the maker's top professional brand, delivered to the site in the original unopened sealed containers.

Materials are specified under type of surface to be finished. Equal products by MAB or Porter may be used.

Vehicles shall be as recommended by the manufacturer of the particular product used. Thinning shall be done only in accordance with the manufacturer's recommendations using only thinning or reducing materials meeting manufacturer's approval.

No claim by the Contractor concerning the unsuitability of any material specified or his inability to produce first-class work with same will be entertained unless such claim is made in writing to the Engineer before the Contract is signed. Deliver materials in original sealed containers.

Painting contractor will submit name of material manufacturer and supply Engineer, through Prime Contractor, with color selection charts, chips, etc., if same are not available in Engineer's office, for all color selection.

No painting to be done until final samples are approved.

2.2 EXTERIOR PAINT SCHEDULE

A. Painted Galvanized Hollow Metal Steel Door and Frame:

1. Hand tool and solvent clean to remove any existing oils or failed primers.
2. Application by brush or roller on remaining items.
3. First Coat: Acrylic Primer
 - a. Sherwin Williams Galvite HS
4. Second and Third Coats: Urethane Alkyd Enamel
 - a. Sherwin Williams Pro Industrial Urethane Alkyd Enamel

2.3 INTERIOR PAINT SCHEDULE

A. Painted Gypsum Drywall: (All walls and ceilings except as indicated differently)

1. Application by brush and roller.
2. First Coat: Latex Primer
 - a. Sherwin Williams ProMar 200 Interior Latex Primer
3. Second and Third Coats: Interior Latex Satin
 - a. Sherwin Williams SuperPaint Interior Latex Satin A87-100 Series

B. Painted Gypsum Drywall:

Walls and Ceilings for Restrooms and Storage Rooms

1. Application by brush and roller.
2. First Coat: Latex Primer
 - a. Sherwin Williams ProMar 200 Interior Latex Primer
3. Second and Third Coats: Pre-Catalyzed Waterbased Epoxy
 - a. Sherwin Williams Pro Industrial Pre-Catalyzed Waterbased Epoxy

C. Painted Hollow Metal Steel Door and Frame:

1. Application by brush and roller.
2. First Coat: Pre-Primed by Mfg.
3. Second and Third Coats: Urethane Alkyd Enamel
 - a. Sherwin Williams Pro Industrial Urethane Alkyd Enamel

PART 3: EXECUTION

3.1 FINISH THICKNESS

All painting and finishing work done in this project shall have a minimum total dry film thickness (DFT) of not less than that noted hereinafter, with spreading rate noted.

3.2 WORKMANSHIP

The painting subcontractor shall be responsible for inspecting the work of others prior to the application of any paint or finishing material. If any surface to be finished can- not be put in proper condition for finishing by customary cleaning, sanding and putty operations, the painting subcontractor shall immediately notify the General Contractor in writing; or assume responsibility for and rectify any unsatisfactory finish resulting.

Backpriming will be required for all interior and exterior wood items.

Each coat of paint shall be slightly darker than preceding coat unless otherwise directed by Engineer or Owner. Undercoats shall be tinted similar to finish coats.

Prime coats will not be required on items delivered with prime or shop coats already applied. Touch-up primer or shop coats.

Field painting will not be required on items specified to be completely finished at factory or on aluminum copper, brass, bronze and other non-ferrous metal unless specifically designated. Interior caulking will be painted.

3.3 STORAGE

All materials used on the job shall be stored in a single place designated by the General Contractor and approved by the Engineer and Owner. The storage area must be kept clean and neat. Floors shall be adequately protected from spillage with proper covers. Any oil rags, waste, etc., must be removed each night after being placed in a covered receptacle during the day.

All precautions against fire must be taken.

3.4 PREPARATION

All surfaces to be painted or finished shall be prepared carefully and inspected before starting the work. No paint or other finish shall be applied until the surfaces are absolutely clean, dry and in proper condition to receive the work.

END OF SECTION

SECTION 10155 – TOILET PARTITIONS

PART 1: GENERAL The General Conditions and other Contract Documents are hereby made a part of this Section to the same extent as if written out in full.

1.1 SCOPE

Work includes installation of all toilet partitions and urinal screens shown on the drawings.

1.2 SUBMITTALS

- A. Submit manufacturer's product literature and installation instructions for type of toilet partitions required.
- B. Submit data showing physical properties of the toilet partitions along with the hardware and installation instructions.

1.3 QUALITY ASSURANCE

- A. Installer: To be a regularly engaged in the installation of toilet partitions specified and shall have proper experience to install the work specified.
- B. Manufacturer: The manufacturer shall be a company regularly engaged in the manufacturer of the toilet partitions specified.

PART 2: MATERIAL

2.1 TOILET PARTITIONS AND URINAL SCREENS

- A. Furnish and install Bobrick SierraSereis 1090 Solid Color Reinforced Composite toilet partitions, doors, and urinal screens, etc. where indicated on the drawings.
- B. Toilet compartments shall be overhead-braced type.
- C. Hardware shall be heavy duty type 304 satin finish stainless steel.
- D. Urinal screens shall be 24" wide x 42" high
- E. Color to be selected by Owner

PART 3: EXECUTION

3.1 INSTALLATION

All products to be installed in strict accordance with the manufacturer's installation specifications.

3.2 TRAINING

Where special training is required, the installer shall be trained in accordance with the manufacturer's training program and shall be experience in the installation of such work.

END OF SECTION

SECTION 15000 - PROVISIONS COMMON TO DIVISIONS 15200, 15300, & 16000

PART 1: GENERAL The provisions of DIVISION 1 and DIVISION 2 preceding these specifications are part of these specifications and this Contractor is to consult them for instructions pertaining to the work under this heading. Note particularly the section on "Proposals ,and Alternates" preceding these specifications.

Where work covered by this specification connects to equipment furnished by others, this Contractor shall check the equipment in the field and will be held responsible for the proper connections to such equipment.

Wherever the phrase "this Contractor" is used in the Article, it refers to the specific contractor involved.

1.1 CONTRACTOR'S NOTE

Immediately upon awarding of the contract, the Contractor must confer with the General Contractor on the building and arrange for proper provisions to be made for the carrying on of all work provided in this specification.

The Contractor shall order all equipment immediately upon signing of contract or receipt of notice to proceed and upon approval of shop drawings. He shall notify the General Contractor of delivery dates and changes therein in writing with copy of written notice to the Engineer. He shall check accesses for equipment to insure doorways, hatches, etc., are sufficient to pass any equipment required. It will be the Contractor's responsibility to prevent any undue delay by reason of delayed or postponed shipment dates.

1.2 OPEN COMPETITION

Where manufacturer's names or trade names are mentioned throughout these Plumbing, Heating, Ventilating & Electrical Specifications, it is done for the express purpose of establishing quality or type of design and not for limiting competition. Other manufacturers' products may be used if, in the opinion of the Engineer, they are equal in all respects and meet the specifications as hereinafter described or shown on the drawings.

1.3 GUARANTEE

Each Contractor shall keep his entire portion of the work in repair, so far as defects in workmanship, apparatus, or material or construction are concerned, for one (1) year from date of final certificate, without further charge; but this clause shall not be interpreted as holding him responsible for making good any deterioration due to it's use or abuse.

Any equipment installed by this Contractor which fails to meet performance ratings specified and shown on drawings shall be removed and replaced by equipment which meets all specified requirements without additional cost to the Owner.

1.4 DRAWINGS

This Contractor shall have a set of General, Structural, Mechanical and Electrical drawings on the site, and before installing any of his work he shall see that it does not interfere with clearance required for foundations, finished columns, pilasters, partitions, wall, electrical outlets, etc., and structural members as shown on the General drawings and details. If work is so installed and it develops that interferences occur which have not been called to the Engineer's attention before it's installation, this Contractor, at his own expense, shall make such changes in his work as directed by the Engineer.

1.5 AS CONSTRUCTED DRAWINGS

In order that the Engineer may make corrections to contract drawings, this Contractor shall, during the progress of the work, furnish the Engineer with sketches or prints of drawings marked in colored pencil showing the exact, as installed, location of any concealed work which deviates in any way from the contract drawings.

1.6 SHOP DRAWINGS

Shop drawings shall be submitted as set forth by the GENERAL CONDITIONS.

1.7 OPERATING INSTRUCTIONS

At the termination of this Contractor's work, at the time the building is officially turned over to the Owner, this Contractor shall furnish to the Owner a complete portfolio containing shop drawings, operating instructions, etc., on all equipment furnished by him under this contract. Also, he shall furnish a competent instructor to advise the maintenance personnel as to the proper operation and servicing of any special equipment installed by him.

1.8 LEAK DAMAGE

This Contractor shall be responsible for damage to the work of other Contractors or to the building and its contents caused by leaks in any of the equipment installed by him or by disconnected pipes, fittings, overflows, freeze-ups, etc.

1.9 CLEANING OF PREMISES

This Contractor shall keep the premises clean of all debris caused by his work at all times, and shall keep his materials stored in such a manner so as not to interfere with the progress of the work of other contractors.

Remove all labels and clean all equipment before final inspection.

1.10 PAINTING

All painting of new work will be done by the General Contractor under his portion of the specification, but the Mechanical and Electrical Contractors shall clean all equipment, pipe, insulation, valves, conduit, boxes, etc., to be painted. All labels except those required by law shall be removed. All loose scale, dust and dirt shall be removed.

1.11 ADJUSTMENTS TO BUILDING CONDITIONS

The location and arrangement of the various parts of the installation are indicated on the drawings. Under no circumstances shall any sizes be decreased or radical changes in any part of the installation be made without the written consent of the Engineer.

When necessary to fit and center with tile, plaster and/or other paneling of wall space, this Contractor must, at his own expense, shift the fixture, grille, or other outlet as directed by the Engineer or his representative. Note that prior to installation of suspended tile ceilings the Mechanical and Electrical Contractors shall coordinate tile pattern with the General Contractor.

1.12 COORDINATION OF CONTRACTORS

All sub-contracts shall be made strictly subject to the approval of the Engineer.

Each bidder shall file with his proposal a list of sub-contractors proposed for the principal parts of the work he proposes to sub-let and receive Engineer's approval before any work is sub-let.

The Owner reserves the right to let other contracts in connection with this work. This Contractor shall extend to other contractors reasonable opportunity for the introduction and the storage of their materials and the execution of their work. This Contractor shall cooperate to the best of his ability with other contractors on the work and shall properly connect and coordinate his work with theirs.

In the interest of a properly coordinated and integrated Electrical System, the Electrical Contractor shall furnish and install all motor circuit wiring and control circuit wiring, together with connection to all electrical Drawings, or described in the Electrical Specifications. This will include standard starters, circuit breakers, cut-outs, separable attachment devices, control stations, etc., as indicated by symbol or description.

Other contractors whose equipment includes electrical components which require electrical accessories and wiring shall furnish the motor starters, controls, etc., which are ordinarily built into their equipment. The other contractors shall also furnish all externally mounted auxiliaries and electrical devices which are special accessories to their equipment. These include pressure, float, temperature, time liquid flow, and limit switches. Also, "T-stat", damper controls, relays, special devices and non-standard attachments.

Electrical services and connections to the other contractors' equipment, insofar as can reasonably be determined beforehand, are shown on the Electrical Drawings and shall be completed by the Electrical Contractor. Deviations, modifications and additions to the Electrical part of the other contractors work as described, however, shall be the responsibility of the other contractors.

Other contractors shall cooperate with the Electrical Contractor on the location of the outlet boxes, switches, controls, etc. They shall also be responsible for the correct locations of all the above items pertaining to their equipment and shall provide for all labor required to mount in place the various items of equipment except for the electrical hook-up.

All electrically operated or electrically controlled equipment which is furnished by other contractors shall have voltage, phase and frequency characteristics to match the system as described in the Electrical Specifications.

1.13 ERECTING

Each contractor shall do all erecting and installing work promptly, and as the work of other contractors progresses in such manner as not to cause delay to other contractors.

All wall sleeves in brick, concrete block, or concrete walls or slabs to receive piping shall be placed by this contractor as the structure is placed in order to avoid necessity for cutting through finished work. No cutting of finished work will be permitted except as approved by the Engineer. Should any cutting of finished work be necessary, all patching shall be done by this Contractor to match adjoining work and original paint finish shall be completed from wall to wall. No patch painting will be accepted.

1.14 WALL CHASES

Each contractor must superintend the building of chases for pipes in walls. He shall furnish the necessary information in this regard to the General and Masonry Contractors at the proper time, and he will be held responsible for the correct size and location of chases, as these may not be shown on the other contractors' drawings.

1.15 CUTTING AND PATCHING

Each contractor shall do all cutting, fitting, and patching necessary to properly install his work unless specifically noted otherwise in these specifications or on the drawings.

1.16 EXCAVATION

Each contractor shall do any and all excavation necessary in the construction of his particular part of the work as included in these specifications, and all sheathing and bracing with proper material which may, in the opinion of the Engineer, be necessary for the protection of foundations and walls of the building, and shall keep all excavations free from water by pumping or bailing during the progress of the work.

All surplus earth shall be removed from the premises or disposed of on the premises as directed by the Engineer and Owner.

Compaction of soil shall be as stated in the Section 2200 Soil Conditions for all trenching.

A line shall be used to mark out trenches for sewers, pipe, etc., and there shall be no variation from the drawings except by order of the Engineer.

1.17 STANDARDIZATION

Insofar as possible, materials shall be standardized, i.e., all steel pipe of one brand, all specialties of one make, all valves of one make, all panels of one make, all switches of one make, all starters of one make, etc.

1.18 MARKING OF VALVES AND EQUIPMENT

Each and every valve which controls supplies to fixtures or appliances which are not directly adjacent and fixable, including all valves in basement, shall be tagged by the contractor whose equipment is served, with a brass tag wired on with No. 10 copper wire

1.19 CODE BANDING

All pipes shall be code-banded or stenciled near each valve and branch take-off from main and at intervals of not less than every 50 feet on long exposed runs. This shall be done after final coat of paint is applied. The owner shall be consulted before applying code banding or stenciling and his code used when applicable.

1.20 ELECTRICAL MOTORS AND WIRING

All electric wiring for heating and ventilating and plumbing equipment will be done under the Electrical Specifications except as otherwise specified. The Electrical Contractor shall furnish combination line starters and push-button stations, unless they are specifically called for in the Mechanical Specifications. The Mechanical Contractor shall be responsible for the procurement of manufacturer's wiring diagrams

which will correlate the equipment to be furnished by the Electrical Contractor with the respective manufacturer's specialties.

The required voltage for each motor is given with each class of equipment. All motors shall conform to applicable NEMA Standards for quiet operation, standard frame size, permissible temperatures rise and suitable enclosure for the service intended.

1.21 CONCRETE

See Sections 3100 Concrete Form Work, Section 3200 Concrete Reinforcement, and Section 3300 Cast-In-Place Concrete for more information on concrete requirements.

1.22 FOUNDATIONS

All motor-driven equipment on basement floor and their accessories shall be installed on concrete foundations 4" high, unless otherwise specified or noted on the drawings. Note that certain foundations will be provided by the General Contractor; however, this Contractor shall furnish him the exact dimensions of the foundation required.

1.23 CLEANING OF PIPING AND DUCTWORK SYSTEMS

Each piping system shall be thoroughly cleaned by flushing out with water prior to turning over to the Owner.

Domestic water systems of plumbing shall be thoroughly flushed out and flushing water wasted to sewer for a period not less than 15 minutes. Mains shall be flushed first by flushing out the furthest branch lines and progressing backwards toward source, flushing each branch line. Valve discs shall be removed before flushing except branch shut-off valve.

Ductwork shall be kept clean as it is erected by vacuuming out or by wiping out dirt, grease and oil. Ductwork systems shall not be used for temporary ventilation unless the Contractor furnishes and maintains filters in all locations as seemed necessary to keep system clean. Filters shall be changed regularly every two weeks in order to keep system clean of construction dirt. Covers shall be placed over inlets and outlets not in temporary use during construction.