

PROJECT MANUAL
FOR CONSTRUCTION OF

2019
BEDFORD NORTH LAWRENCE HS
ART CLASSROOM
CASEWORK REPLACEMENT

NORTH LAWRENCE COMMUNITY SCHOOLS
Bedford, Indiana



KoverHawkins
architects

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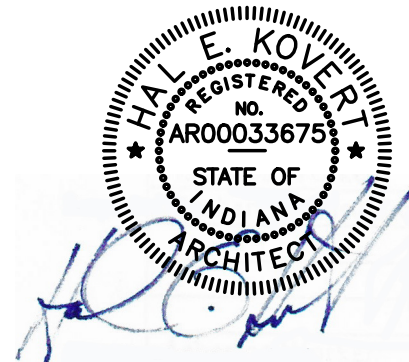
NORTH LAWRENCE COMMUNITY SCHOOLS
Bedford, Indiana

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Date: August 22, 2019
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Hal E. Kovert, AIA
Indiana Architect Reg. No. AR00033675

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SECTION 00 11 13 - NOTICE TO BIDDERS

Notice is hereby given that sealed proposals will be received:

BY: North Lawrence Community Schools
Administrative Service Center
460 "W" Street
Bedford, IN 47421

FOR: North Lawrence Community Schools
BNL: Art Classroom Casework Replacement

AT: North Lawrence Community Schools
Administrative Service Center
460 "W" Street
Bedford, IN 47421

UNTIL: 2:00 PM Project Local Time

DATE: October 09, 2019

At which time all proposals will be opened and publicly read aloud.
Proposals received after the hour and date set for receiving of proposals, will be returned unopened.

All work will be awarded under a single General Contract.

Proposals shall be executed on the Contractor's Bid for Public Works, Form 96 (Revised 2013), Parts I and II, in full accordance with the Proposal Documents, which are on file with the Owner and Architect and may be examined by Bidders at the following locations:

North Lawrence Community Schools
Administrative Service Center
460 "W" Street
Bedford, IN 47421

Kovert Hawkins Architects, Inc.
630 Walnut Street
Jeffersonville, IN 47130
812-282-9554

PRE-BID CONFERENCE

DATE: October 1, 2019
TIME: 4:00 PM Project Local Time
LOCATION: BNL High School

All bidders and plan services will have free access to a complete electronic set of this project's Drawings and Specifications. All bid documents may be downloaded free of charge in electronic PDF format for viewing, printing and distribution to bidders, sub-bidders and suppliers at the discretion and responsibility of the General Contractors. Bidders shall complete the Plan Holder List form via www.koverthawkins.com/bid-information. Upon completion of the form, bidders will be re-directed to the Project Page where all bid information may be downloaded. **Bidders should bookmark this link for future access.**

The Architect retains all copyright to the bid documents, as instruments of their professional service. Bidders, or any other persons, may not use the PDF files for any other purpose than preparing a bid for this project.

Contractors planning to submit a bid for this project are required to be Registered Plan Holders. Registered Plan Holders are only those who complete the Plan Holder List form via the Architect's website as indicated above. Addenda and any other additional information will be emailed only to these registered plan holders (using the address provided on the Plan Holder List form) as they become available. Bidders obtaining partial copies of the bid documents from any other source are not Registered Plan Holders and will not be automatically provided with Addenda or other bidding updates as prepared by the Architect. Non-Registered Plan Holders assume all responsibility for obtaining all necessary information in a timely manner.

Contractors shall certify on the Proposal Form that they have obtained a complete set of construction documents, including all Drawings, Specifications and Addenda, and have reviewed the jobsite to sufficiently familiarize themselves with the existing conditions.

All questions and requests for substitutions shall be directed to:

Amanda Hunsucker

Kovert Hawkins Architects, Inc.

Amanda.hunsucker@koverthawkins.com

812-913-4613

Bid Security in the amount of five percent (5%) of the Proposal, including all add alternates must accompany each Proposal in accordance with the Instructions to Bidders.

The Owner reserves the right to accept or reject any bid and to waive any irregularities in bidding. The Base Bid may be held for a period not to exceed Forty-Five (45) days before awarding Contracts. All additive Alternate Bids may be held for a period not to exceed Thirty (30) days after signing of Contract.

Should a successful Bidder withdraw his bid, or fail to execute a satisfactory contract within ten (10) days after notice of acceptance of his bid, the Owner may declare the Bid Security forfeited as liquidated damages, not as penalty.

The successful Bidder shall furnish a Performance Bond and Labor and Materials Payment Bond in an amount equal to one hundred percent (100%) of the Contract Sum with an approved surety company and said bond shall remain in full force and effect for a period of one (1) year after date of final acceptance of the work. The cost of all bonds shall be included in the bid price.

NORTH LAWRENCE COMMUNITY SCHOOLS

August 27, 2019

END OF SECTION 00 11 13

AIA® Document A701™ – 1997

Instructions to Bidders

for the following PROJECT:

(Name and location or address)

North Lawrence Community Schools
BNL: Art Classroom Casework Replacement
Bedford IN

THE OWNER:

(Name, legal status and address)

North Lawrence Community Schools
Administrative Service Center
460 W Street
Bedford, IN 47421-0729

THE ARCHITECT:

(Name, legal status and address)

Kovert Hawkins Architects, Inc.
630 Walnut Street
Jeffersonville, IN 47130

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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.

ARTICLE 1 DEFINITIONS

§ 1.1 Bidding Documents include the Bidding Requirements and the proposed Contract Documents. The Bidding Requirements consist of the Advertisement or Invitation to Bid, Instructions to Bidders, Supplementary Instructions to Bidders, the bid form, and other sample bidding and contract forms. The proposed Contract Documents consist of the form of Agreement between the Owner and Contractor, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications and all Addenda issued prior to execution of the Contract.

§ 1.2 Definitions set forth in the General Conditions of the Contract for Construction, AIA Document A201, or in other Contract Documents are applicable to the Bidding Documents.

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

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

§ 1.5 The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which Work may be added or from which Work may be deleted for sums stated in Alternate Bids.

§ 1.6 An Alternate Bid (or Alternate) is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted.

§ 1.7 A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials, equipment or services or a portion of the Work as described in the Bidding Documents.

§ 1.8 A Bidder is a person or entity who submits a Bid and who meets the requirements set forth in the Bidding Documents.

§ 1.9 A Sub-bidder is a person or entity who submits a bid to a Bidder for materials, equipment or labor for a portion of the Work.

ARTICLE 2 BIDDER'S REPRESENTATIONS

§ 2.1 The Bidder by making a Bid represents that:

§ 2.1.1 The Bidder has read and understands the Bidding Documents or Contract Documents, to the extent that such documentation relates to the Work for which the Bid is submitted, and for other portions of the Project, if any, being bid concurrently or presently under construction.

§ 2.1.2 The Bid is made in compliance with the Bidding Documents.

§ 2.1.3 The Bidder has visited the site, become familiar with local conditions under which the Work is to be performed and has correlated the Bidder's personal observations with the requirements of the proposed Contract Documents.

§ 2.1.4 The Bid is based upon the materials, equipment and systems required by the Bidding Documents without exception.

ARTICLE 3 BIDDING DOCUMENTS

§ 3.1 COPIES

§ 3.1.1 Bidders may obtain complete sets of the Bidding Documents from the issuing office designated in the Advertisement or Invitation to Bid in the number and for the deposit sum, if any, stated therein. The deposit will be refunded to Bidders who submit a bona fide Bid and return the Bidding Documents in good condition within ten days after receipt of Bids. The cost of replacement of missing or damaged documents will be deducted from the deposit. A Bidder receiving a Contract award may retain the Bidding Documents and the Bidder's deposit will be refunded.

§ 3.1.2 Bidding Documents will not be issued directly to Sub-bidders unless specifically offered in the Advertisement or Invitation to Bid, or in supplementary instructions to bidders.

§ 3.1.3 Bidders shall use complete sets of Bidding Documents in preparing Bids; neither the Owner nor Architect assumes responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

§ 3.1.4 The Owner and Architect may make copies of the Bidding Documents available on the above terms for the purpose of obtaining Bids on the Work. No license or grant of use is conferred by issuance of copies of the Bidding Documents.

§ 3.2 INTERPRETATION OR CORRECTION OF BIDDING DOCUMENTS

§ 3.2.1 The Bidder shall carefully study and compare the Bidding Documents with each other, and with other work being bid concurrently or presently under construction to the extent that it relates to the Work for which the Bid is submitted, shall examine the site and local conditions, and shall at once report to the Architect errors, inconsistencies or ambiguities discovered.

§ 3.2.2 Bidders and Sub-bidders requiring clarification or interpretation of the Bidding Documents shall make a written request which shall reach the Architect at least seven days prior to the date for receipt of Bids.

§ 3.2.3 Interpretations, corrections and changes of the Bidding Documents will be made by Addendum. Interpretations, corrections and changes of the Bidding Documents made in any other manner will not be binding, and Bidders shall not rely upon them.

§ 3.3 SUBSTITUTIONS

§ 3.3.1 The materials, products and equipment described in the Bidding Documents establish a standard of required function, dimension, appearance and quality to be met by any proposed substitution.

§ 3.3.2 No substitution will be considered prior to receipt of Bids unless written request for approval has been received by the Architect at least ten days prior to the date for receipt of Bids. Such requests shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitution including drawings, performance and test data, and other information necessary for an evaluation. A statement setting forth changes in other materials, equipment or other portions of the Work, including changes in the work of other contracts that incorporation of the proposed substitution would require, shall be included. The burden of proof of the merit of the proposed substitution is upon the proposer. The Architect's decision of approval or disapproval of a proposed substitution shall be final.

§ 3.3.3 If the Architect approves a proposed substitution prior to receipt of Bids, such approval will be set forth in an Addendum. Bidders shall not rely upon approvals made in any other manner.

§ 3.3.4 No substitutions will be considered after the Contract award unless specifically provided for in the Contract Documents.

§ 3.4 ADDENDA

§ 3.4.1 Addenda will be transmitted to all who are known by the issuing office to have received a complete set of Bidding Documents.

§ 3.4.2 Copies of Addenda will be made available for inspection wherever Bidding Documents are on file for that purpose.

§ 3.4.3 Addenda will be issued no later than four days prior to the date for receipt of Bids except an Addendum withdrawing the request for Bids or one which includes postponement of the date for receipt of Bids.

§ 3.4.4 Each Bidder shall ascertain prior to submitting a Bid that the Bidder has received all Addenda issued, and the Bidder shall acknowledge their receipt in the Bid.

ARTICLE 4 BIDDING PROCEDURES

§ 4.1 PREPARATION OF BIDS

§ 4.1.1 Bids shall be submitted on the forms included with the Bidding Documents.

§ 4.1.2 All blanks on the bid form shall be legibly executed in a non-erasable medium.

§ 4.1.3 Sums shall be expressed in both words and figures. In case of discrepancy, the amount written in words shall govern.

§ 4.1.4 Interlineations, alterations and erasures must be initialed by the signer of the Bid.

§ 4.1.5 All requested Alternates shall be bid. If no change in the Base Bid is required, enter "No Change."

§ 4.1.6 Where two or more Bids for designated portions of the Work have been requested, the Bidder may, without forfeiture of the bid security, state the Bidder's refusal to accept award of less than the combination of Bids stipulated by the Bidder. The Bidder shall make no additional stipulations on the bid form nor qualify the Bid in any other manner.

§ 4.1.7 Each copy of the Bid shall state the legal name of the Bidder and the nature of legal form of the Bidder. The Bidder shall provide evidence of legal authority to perform within the jurisdiction of the Work. Each copy shall be signed by the person or persons legally authorized to bind the Bidder to a contract. A Bid by a corporation shall further give the state of incorporation and have the corporate seal affixed. A Bid submitted by an agent shall have a current power of attorney attached certifying the agent's authority to bind the Bidder.

§ 4.2 BID SECURITY

§ 4.2.1 Each Bid shall be accompanied by a bid security in the form and amount required if so stipulated in the Instructions to Bidders. The Bidder pledges to enter into a Contract with the Owner on the terms stated in the Bid and will, if required, furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder. Should the Bidder refuse to enter into such Contract or fail to furnish such bonds if required, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as a penalty. The amount of the bid security shall not be forfeited to the Owner in the event the Owner fails to comply with Section 6.2.

§ 4.2.2 If a surety bond is required, it shall be written on AIA Document A310, Bid Bond, unless otherwise provided in the Bidding Documents, and the attorney-in-fact who executes the bond on behalf of the surety shall affix to the bond a certified and current copy of the power of attorney.

§ 4.2.3 The Owner will have the right to retain the bid security of Bidders to whom an award is being considered until either (a) the Contract has been executed and bonds, if required, have been furnished, or (b) the specified time has elapsed so that Bids may be withdrawn or (c) all Bids have been rejected.

§ 4.3 SUBMISSION OF BIDS

§ 4.3.1 All copies of the Bid, the bid security, if any, and any other documents required to be submitted with the Bid shall be enclosed in a sealed opaque envelope. The envelope shall be addressed to the party receiving the Bids and shall be identified with the Project name, the Bidder's name and address and, if applicable, the designated portion of the Work for which the Bid is submitted. If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "SEALED BID ENCLOSED" on the face thereof.

§ 4.3.2 Bids shall be deposited at the designated location prior to the time and date for receipt of Bids. Bids received after the time and date for receipt of Bids will be returned unopened.

§ 4.3.3 The Bidder shall assume full responsibility for timely delivery at the location designated for receipt of Bids.

§ 4.3.4 Oral, telephonic, telegraphic, facsimile or other electronically transmitted bids will not be considered.

§ 4.4 MODIFICATION OR WITHDRAWAL OF BID

§ 4.4.1 A Bid may not be modified, withdrawn or canceled by the Bidder during the stipulated time period following the time and date designated for the receipt of Bids, and each Bidder so agrees in submitting a Bid.

§ 4.4.2 Prior to the time and date designated for receipt of Bids, a Bid submitted may be modified or withdrawn by notice to the party receiving Bids at the place designated for receipt of Bids. Such notice shall be in writing over the signature of the Bidder. Written confirmation over the signature of the Bidder shall be received, and date- and time-stamped by the receiving party on or before the date and time set for receipt of Bids. A change shall be so worded as not to reveal the amount of the original Bid.

§ 4.4.3 Withdrawn Bids may be resubmitted up to the date and time designated for the receipt of Bids provided that they are then fully in conformance with these Instructions to Bidders.

§ 4.4.4 Bid security, if required, shall be in an amount sufficient for the Bid as resubmitted.

ARTICLE 5 CONSIDERATION OF BIDS

§ 5.1 OPENING OF BIDS

At the discretion of the Owner, if stipulated in the Advertisement or Invitation to Bid, the properly identified Bids received on time will be publicly opened and will be read aloud. An abstract of the Bids may be made available to Bidders.

§ 5.2 REJECTION OF BIDS

The Owner shall have the right to reject any or all Bids. A Bid not accompanied by a required bid security or by other data required by the Bidding Documents, or a Bid which is in any way incomplete or irregular is subject to rejection.

§ 5.3 ACCEPTANCE OF BID (AWARD)

§ 5.3.1 It is the intent of the Owner to award a Contract to the lowest qualified Bidder provided the Bid has been submitted in accordance with the requirements of the Bidding Documents and does not exceed the funds available. The Owner shall have the right to waive informalities and irregularities in a Bid received and to accept the Bid which, in the Owner's judgment, is in the Owner's own best interests.

§ 5.3.2 The Owner shall have the right to accept Alternates in any order or combination, unless otherwise specifically provided in the Bidding Documents, and to determine the low Bidder on the basis of the sum of the Base Bid and Alternates accepted.

ARTICLE 6 POST-BID INFORMATION

§ 6.1 CONTRACTOR'S QUALIFICATION STATEMENT

Bidders to whom award of a Contract is under consideration shall submit to the Architect, upon request, a properly executed AIA Document A305, Contractor's Qualification Statement, unless such a Statement has been previously required and submitted as a prerequisite to the issuance of Bidding Documents.

§ 6.2 OWNER'S FINANCIAL CAPABILITY

The Owner shall, at the request of the Bidder to whom award of a Contract is under consideration and no later than seven days prior to the expiration of the time for withdrawal of Bids, furnish to the Bidder reasonable evidence that financial arrangements have been made to fulfill the Owner's obligations under the Contract. Unless such reasonable evidence is furnished, the Bidder will not be required to execute the Agreement between the Owner and Contractor.

§ 6.3 SUBMITTALS

§ 6.3.1 The Bidder shall, as soon as practicable or as stipulated in the Bidding Documents, after notification of selection for the award of a Contract, furnish to the Owner through the Architect in writing:

- .1 a designation of the Work to be performed with the Bidder's own forces;
- .2 names of the manufacturers, products, and the suppliers of principal items or systems of materials and equipment proposed for the Work; and
- .3 names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for the principal portions of the Work.

§ 6.3.2 The Bidder will be required to establish to the satisfaction of the Architect and Owner the reliability and responsibility of the persons or entities proposed to furnish and perform the Work described in the Bidding Documents.

§ 6.3.3 Prior to the execution of the Contract, the Architect will notify the Bidder in writing if either the Owner or Architect, after due investigation, has reasonable objection to a person or entity proposed by the Bidder. If the Owner or Architect has reasonable objection to a proposed person or entity, the Bidder may, at the Bidder's option, (1) withdraw the Bid or (2) submit an acceptable substitute person or entity with an adjustment in the Base Bid or Alternate Bid to cover the difference in cost occasioned by such substitution. The Owner may accept the adjusted bid price or disqualify the Bidder. In the event of either withdrawal or disqualification, bid security will not be forfeited.

§ 6.3.4 Persons and entities proposed by the Bidder and to whom the Owner and Architect have made no reasonable objection must be used on the Work for which they were proposed and shall not be changed except with the written consent of the Owner and Architect.

ARTICLE 7 PERFORMANCE BOND AND PAYMENT BOND

§ 7.1 BOND REQUIREMENTS

§ 7.1.1 If stipulated in the Bidding Documents, the Bidder shall furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder. Bonds may be secured through the Bidder's usual sources.

§ 7.1.2 If the furnishing of such bonds is stipulated in the Bidding Documents, the cost shall be included in the Bid. If the furnishing of such bonds is required after receipt of bids and before execution of the Contract, the cost of such bonds shall be added to the Bid in determining the Contract Sum.

§ 7.1.3 If the Owner requires that bonds be secured from other than the Bidder's usual sources, changes in cost will be adjusted as provided in the Contract Documents.

§ 7.2 TIME OF DELIVERY AND FORM OF BONDS

§ 7.2.1 The Bidder shall deliver the required bonds to the Owner not later than three days following the date of execution of the Contract. If the Work is to be commenced prior thereto in response to a letter of intent, the Bidder shall, prior to commencement of the Work, submit evidence satisfactory to the Owner that such bonds will be furnished and delivered in accordance with this Section 7.2.1.

§ 7.2.2 Unless otherwise provided, the bonds shall be written on AIA Document A312, Performance Bond and Payment Bond. Both bonds shall be written in the amount of the Contract Sum.

§ 7.2.3 The bonds shall be dated on or after the date of the Contract.

§ 7.2.4 The Bidder shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of the power of attorney.

ARTICLE 8 FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR

Unless otherwise required in the Bidding Documents, the Agreement for the Work will be written on AIA Document A101, Standard Form of Agreement Between Owner and Contractor Where the Basis of Payment Is a Stipulated Sum.

SECTION 00 22 13 - SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

The following supplements modify the Instructions to Bidders, AIA Document A701 - 2018, entitled "Instructions to Bidders". Where a portion of the Instruction to Bidders is modified or deleted by these Supplementary Instructions, the unaltered portions of the Instructions To Bidders shall remain in effect.

ARTICLE 9 - SUPPLEMENTARY INSTRUCTIONS

- 9.1 Article 3 - BIDDING DOCUMENTS, delete the current Paragraph and replace with the following:
3.1.1 All bid documents may be downloaded free of charge in PDF format for viewing, printing and distribution to bidders, sub-bidders and suppliers at the discretion and responsibility of the general contractors. All information is posted on a website identified in the Notice To Bidders or available by contacting the Architect. The Architect retains all copyright to all Bid Documents. Bidders may not use the Bid Documents for any purpose except preparing a bid for this project. Bidders may not distribute Bid Documents to Plan Room services, either electronic or hard copy, without the express written permission of the Architect. Printing of bid documents, including all costs associated therewith, is to be borne by the bidders.
- 9.2 Article 3 - BIDDING DOCUMENTS, delete the current Paragraph and replace with the following:
3.1.2 Bid documents are available to sub-bidders in accordance with Paragraph 3.1.1.
- 9.3 Article 3 - BIDDING DOCUMENTS, add the following Paragraph:
3.1.5 In the event of any discrepancy between electronic versions and any hard copy, printed versions of the files, the hard copy version on file at the Architect's office will govern.
- 9.4 Article 3 - BIDDING DOCUMENTS, add the following Paragraph:
3.3.5 When specifications include a list of acceptable manufacturers, it is done for the express purpose of establishing a basis of durability, efficiency, configuration, maintain Owner's maintenance stock, and not for the purpose of limiting competition. These said names establish the products on which the bidder's proposal shall be based for that particular specification item. Proposed substitutions must be submitted in accordance with Specification Section 01 62 00 - Product Options and Substitutions.
- 9.5 Article 3 - BIDDING DOCUMENTS, delete Paragraph 3.4.3.
- 9.6 Bidder shall submit financial statement demonstrating financial capability to complete project, as required by the Proposal Form.
- 9.7 Bidder shall submit two (2) copies of all required Bidding Documents.
- 9.8 All bidders shall submit Contractor's Bid For Public Works-Form 96, Part I and Part II (Revised 2013), as required by the Proposal Form.
- 9.9 Bidders are required to include unit prices on added or deleted work as listed on the Contractor's Bid Form.
- 9.11 Article 7 – PERFORMANCE BOND AND PAYMENT BOND.
Under Section 7.1.1, delete the words "If stipulated in the Bidding Documents, the" and substitute the word "The".
Under Section 7.1.1, add the following sentence: "The costs for all Bonds must be included in the bid price."
Delete Section 7.1.2 in its entirety.
- 9.11 Article 7 – PERFORMANCE BOND AND PAYMENT BOND, delete Article 7 in its entirety.

9.12 Materials supplied for this project are exempt from Indiana State Sales Tax. Products purchased from sources outside the State of Indiana may require payment of sales tax to that particular jurisdiction. All costs for such tax will be the responsibility of the Contractor.

9.13 Electronic submissions of bids are NOT acceptable. This includes fax and e-mail.

END OF SECTION 00 22 13

SECTION 00 41 00 – CONTRACTOR’S BID FORM: PUBLIC WORKS

1.01 PROJECT MANUAL

- A. All requirements of the Project Manual shall apply to this Section.

1.02 SCOPE

- A. Contractor’s Bid Form shall be Contractor’s Bid For Public Works-Form 96 (Revised 2013), as modified and as included in Section 00 42 01 and Section 00 42 02.
1. Part I of Form 96 must be completed as required by statutes.
 2. Part II of Form 96 must be completed as required by statutes only if project is one hundred thousand dollars (\$100,000) or more (IC 36-1-12-4).
 3. Proposal form shall be submitted in duplicate (one signed original and one copy).
 4. Forms to be reproductions of those included in Project Manual.
 5. Contractor may bid each, any, or all separate contracts listed.
- B. The executed Proposal Form and Non-Collusion Affidavit will become a part of the successful Bidder’s Contract Documents.

END OF SECTION 00 41 00

PROPOSAL FORM: PART I
Form 96 (Revised 2013)

CONTRACTOR'S BID FOR PUBLIC WORKS

Prescribed by the State Board of Accounts

CONTRACTORS BID FOR: **North Lawrence Community Schools**
BNL: Art Classroom Casework Replacement
Bedford, Indiana

PART I

(Part I to be completed for all bids)

Date (Month, Day, Year): _____

Governmental Unit (Owner): **North Lawrence Community Schools**

County: _____

Bidder (Firm): _____

Address: _____

City, State, Zip: _____

Telephone No.: _____

Fax No.: _____

E-Mail Address: _____

Agent of Bidder: _____
(if applicable)

Pursuant to notices given, the undersigned offers to furnish labor and/or material necessary to complete the public works project of North Lawrence Community Schools in accordance with plans and specifications prepared by Kovert Hawkins Architects, Inc. and their consultants for the sum of:

BASE BID

Lump Sum _____ \$ _____

The undersigned further agrees to furnish a bond or certified check with this bid for an amount specified in the notice of the letting. If alternative bids apply, the undersigned submits a proposal for each in accordance with the notice.

ADDENDA

Acknowledges receipt of:

Addendum No. _____ () pages Dated _____

Addendum No. _____ () pages

Dated _____

Addendum No. _____ () pages

Dated _____

ALTERNATES

The undersigned also proposes to furnish or to omit all labor and materials necessary to complete work as required by the Alternate Bids, as provided in the specifications as follows:

Alternate No. 1: Photography Studio ADD \$ _____

Alternate No. 2: Stained Glass Studio ADD \$ _____

Alternate No. 3: Sculpture Studio ADD \$ _____

Alternate No. 4: Ceramics Studio ADD \$ _____

ALLOWANCES

By initialing adjacent to amounts below, bidder acknowledges allowance amounts are included in the forgoing bid:

Contingency Allowance within the **Base Bid** per Section 01220 **\$ 10,000** initials _____

COMPLETION OF WORK

Undersigned guarantees, if awarded contract, to complete the work within _____ () calendar days.

DISCRIMINATION

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.

CERTIFICATION OF USE OF UNITED STATES STEEL PRODUCTS (if applicable)

I, the undersigned bidder or agent as a contractor on a public works project, understand my statutory obligation to use steel products made in the United States (I.C. 5-16-8-2). I hereby certify that I and all subcontractors employed by me for this project will use U.S. steel products on this project if awarded. I understand that violations hereunder may result in forfeiture of contractual payments.

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 induce 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.

GENERAL CONTRACTOR CERTIFICATION

I hereby certify that we have obtained a complete set of construction documents, including all Drawings, Specifications and Addenda, and have reviewed the jobsite to sufficiently familiarize ourselves with the existing conditions.

Dated at _____ this _____ day of _____, 20____.

(Name of Organization)

BY _____

(Title of Person Signing)

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 _____, 20____.

(Name of Organization)

BY _____

(Title of Person Signing)

ACKNOWLEDGEMENT

STATE OF _____

COUNTY OF _____

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

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

Notary Public

My Commission Expires: _____

County of Residence: _____

ACCEPTANCE

The above bid is accepted this _____ day of _____, 20____,

subject to the following conditions: _____
_____.

Contracting Authority Members:

_____	_____
_____	_____
_____	_____

END OF SECTION 00 42 01

PROPOSAL FORM: PART II
Form 96 (Revised 2013)

CONTRACTOR'S BID FOR PUBLIC WORKS

Prescribed by the State Board of Accounts

Part II

(Part II to be completed only if project is \$100,000 or more - IC 36-1-12-4).

Governmental Unit: **North Lawrence Community Schools**

Bidder (Firm): _____

Date: _____

These statements to be submitted under oath by each bidder with and as a part of his bid.
Attach additional pages for each section as needed.

SECTION I: EXPERIENCE QUESTIONNAIRE

1. What public works projects has your organization completed for the period of one (1) year prior to the date of the current bid?

<i>Contract Amount</i>	<i>Class of Work</i>	<i>Completion Date</i>	<i>Name and Address of Owner</i>
------------------------	----------------------	----------------------------	----------------------------------

_____	_____	_____	_____
_____	_____	_____	_____

2. What public works projects are now in process of construction by your organization?

<i>Contract Amount</i>	<i>Class of Work</i>	<i>Expected Completion Date</i>	<i>Name and Address of Owner</i>
------------------------	----------------------	---	----------------------------------

_____	_____	_____	_____
_____	_____	_____	_____

3. Have you ever failed to complete any work awarded to you? _____ If so, where and why?

4. List references from private firms for which you have performed work.

SECTION II: PLAN AND EQUIPMENT QUESTIONNAIRE

1. Explain your plan or layout for performing proposed work.

2. Please list the names and addresses of all subcontractors that you have used on public works projects during the past five (5) years along with a brief description of the work done by each subcontractor.

3. If you intend to sublet any portion of the work, state the name and address of each subcontractor, equipment to be used by the subcontractor, and whether you will require a bond. However, if you are unable to currently provide a listing, please understand a listing must be provided prior to contract approval. Until the completion of the proposed project, you are under a continuing obligation to immediately notify the governmental unit in the event that you subsequently determine that you will use a subcontractor on the proposed project.

4. What equipment do you have available to use for the proposed project? Any equipment to be used by subcontractors may also be required to be listed by the governmental unit.

5. Have you entered into contracts or received offers for all materials which substantiate the prices used in preparing your proposal? If not, please explain the rationale used which would corroborate the prices listed.

SECTION III: CONTRACTOR'S FINANCIAL STATEMENT

Attachment of bidder's financial statement is mandatory. Any bid submitted without said financial statement as required by statute shall thereby be rendered invalid. The financial statement provided hereunder to the governing body awarding the contract must be specific enough in detail so that said governing body can make a proper determination of the bidder's capability for completing the project if awarded.

SECTION IV: 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 induce 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 _____, 20____.

(Name of Organization)

BY

(Title of Person Signing)

ACKNOWLEDGEMENT

STATE OF _____

COUNTY OF _____

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

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

Notary Public

My Commission Expires: _____

County of Residence: _____

END OF SECTION 00 42 02

SECTION 00 43 13 - BID SECURITY FORM

1.01 PROJECT MANUAL

All requirements of the Project Manual shall apply to this Section.

1.02 SCOPE

- A. Contractors Bid Security shall be either:
 - 1. Bid Bond.
 - 2. Certified Check.
 - 3. Cashier's Check.
- B. The Bid Bond, if used, shall be AIA Document A310 - 2010, entitled "Bid Bond".
 - 1. Bond shall be by an acceptable Surety Company licensed to do business in the State of **Indiana**.
 - 2. A copy of this form is bound herewith.
- C. Bid Security shall be:
 - 1. In an amount equal to five (5) percent of the total lump sum base bid plus (5) percent of all add alternates.
 - 2. Security shall be executed in favor of the Owner.
 - 3. Should the successful Bidder fail to enter into a contract or furnish the required Bonds within ten (10) days from date of notice of award, the Owner may declare the Bidder's Bid Security forfeited and the Security amount retained by the Owner as liquidated damages.
- D. Refer to Section 00 43 93 - Contractor's Bid Submittal Checklist for requirements as to time of submission.

END OF SECTION 00 43 13



AIA® Document A310™ – 2010

Bid Bond

CONTRACTOR:

(Name, legal status and address)

SURETY:

(Name, legal status and principal place of business)

OWNER:

(Name, legal status and address)

North Lawrence Community Schools
Administrative Service Center
460 W Street
Bedford, IN 47421-0729

BOND AMOUNT: \$**PROJECT:**

(Name, location or address, and Project number, if any)

North Lawrence Community Schools
BNL: Art Classroom Casework Replacement
Bedford IN

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.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or

legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this day of ,

(Witness)

(Witness)

(Contractor as Principal)

(Seal)

(Title)

(Surety)

(Seal)

(Title)

Init.

/

SECTION 00 52 00 - AGREEMENT FORM

1.01 PROJECT MANUAL

All requirements of the Project Manual shall apply to this Section.

1.02 SCOPE

A. The agreement shall be AIA Document A101 - 2017, entitled "Standard Form of Agreement Between Owner and Contractor".

1. Where the basis of payment is a stipulated sum.
2. Copy of this form is bound herewith.

B. This form, when fully executed, becomes a part of the successful Bidder's Contract Documents.

END OF SECTION 00 52 00

AIA[®] Document A101[™] – 2017

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

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

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

North Lawrence Community Schools
Administrative Service Center
460 W Street
Bedford, IN 47421-0729
Telephone Number: 812.279.3521
Fax Number: 812.275.1577

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

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

North Lawrence Community Schools
BNL: Art Classroom Casework Replacement
Bedford IN

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

Kovert Hawkins Architects, Inc.
630 Walnut Street
Jeffersonville, IN 47130
Telephone Number: 812.282.9554

The Owner and Contractor agree as follows.

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.

The parties should complete A101[™]–2017, Exhibit A, Insurance and Bonds, contemporaneously with this Agreement. AIA Document A201[™]–2017, General Conditions of the Contract for Construction, is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

TABLE OF ARTICLES

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

EXHIBIT A INSURANCE AND BONDS

ARTICLE 1 THE CONTRACT DOCUMENTS

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

ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others.

ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be:

(Check one of the following boxes.)

- ☐ The date of this Agreement.
- ☐ A date set forth in a notice to proceed issued by the Owner.
- ☐ Established as follows:

(Insert a date or a means to determine the date of commencement of the Work.)

If a date of commencement of the Work is not selected, then the date of commencement shall be the date of this Agreement.

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

§ 3.3 Substantial Completion

§ 3.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall achieve Substantial Completion of the entire Work:

Init.

(Check one of the following boxes and complete the necessary information.)

☐ Not later than () calendar days from the date of commencement of the Work.

☐ By the following date:

§ 3.3.2 Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work are to be completed prior to Substantial Completion of the entire Work, the Contractor shall achieve Substantial Completion of such portions by the following dates:

Portion of Work

Substantial Completion Date

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

ARTICLE 4 CONTRACT SUM

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

§ 4.2 Alternates

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

Item

Price

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

Item

Price

Conditions for Acceptance

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

Item

Price

§ 4.4 Unit prices, if any:

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

Item

Units and Limitations

Price per Unit (\$0.00)

§ 4.5 Liquidated damages, if any:

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

§ 4.6 Other:

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

ARTICLE 5 PAYMENTS

§ 5.1 Progress Payments

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

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

§ 5.1.3 Provided that an Application for Payment is received by the Architect not later than the day of a month, the Owner shall make payment of the amount certified to the Contractor not later than the day of the month. If an Application for Payment is received by the Architect after the application date fixed above, payment of the amount certified shall be made by the Owner not later than () days after the Architect receives the Application for Payment.

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

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

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

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

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

- .1 That portion of the Contract Sum properly allocable to completed Work;
- .2 That portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction, or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing; and
- .3 That portion of Construction Change Directives that the Architect determines, in the Architect's professional judgment, to be reasonably justified.

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

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

§ 5.1.7 Retainage

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

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

§ 5.1.7.1.1 The following items are not subject to retainage:
(Insert any items not subject to the withholding of retainage, such as general conditions, insurance, etc.)

§ 5.1.7.2 Reduction or limitation of retainage, if any, shall be as follows:
(If the retainage established in Section 5.1.7.1 is to be modified prior to Substantial Completion of the entire Work, including modifications for Substantial Completion of portions of the Work as provided in Section 3.3.2, insert provisions for such modifications.)

§ 5.1.7.3 Except as set forth in this Section 5.1.7.3, upon Substantial Completion of the Work, the Contractor may submit an Application for Payment that includes the retainage withheld from prior Applications for Payment pursuant to this Section 5.1.7. The Application for Payment submitted at Substantial Completion shall not include retainage as follows:
(Insert any other conditions for release of retainage upon Substantial Completion.)

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

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

§ 5.2 Final Payment

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

- .1** the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Article 12 of AIA Document A201–2017, and to satisfy other requirements, if any, which extend beyond final payment; and
- .2** a final Certificate for Payment has been issued by the Architect.

§ 5.2.2 The Owner's final payment to the Contractor shall be made no later than 30 days after the issuance of the Architect's final Certificate for Payment, or as follows:

§ 5.3 Interest

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

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

%

ARTICLE 6 DISPUTE RESOLUTION

§ 6.1 Initial Decision Maker

The Architect will serve as the Initial Decision Maker pursuant to Article 15 of AIA Document A201–2017, unless the parties appoint below another individual, not a party to this Agreement, to serve as the Initial Decision Maker.
(If the parties mutually agree, insert the name, address and other contact information of the Initial Decision Maker, if other than the Architect.)

§ 6.2 Binding Dispute Resolution

For any Claim subject to, but not resolved by, mediation pursuant to Article 15 of AIA Document A201–2017, the method of binding dispute resolution shall be as follows:

(Check the appropriate box.)

- ☐ Arbitration pursuant to Section 15.4 of AIA Document A201–2017
- ☐ Litigation in a court of competent jurisdiction
- ☐ Other *(Specify)*

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

ARTICLE 7 TERMINATION OR SUSPENSION

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

§ 7.1.1 If the Contract is terminated for the Owner’s convenience in accordance with Article 14 of AIA Document A201–2017, then the Owner shall pay the Contractor a termination fee as follows:

(Insert the amount of, or method for determining, the fee, if any, payable to the Contractor following a termination for the Owner’s convenience.)

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

ARTICLE 8 MISCELLANEOUS PROVISIONS

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

§ 8.2 The Owner’s representative:

(Name, address, email address, and other information)

§ 8.3 The Contractor’s representative:

(Name, address, email address, and other information)

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

§ 8.5 Insurance and Bonds

§ 8.5.1 The Owner and the Contractor shall purchase and maintain insurance as set forth in AIA Document A101™–2017, Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum, Exhibit A, Insurance and Bonds, and elsewhere in the Contract Documents.

§ 8.5.2 The Contractor shall provide bonds as set forth in AIA Document A101™–2017 Exhibit A, and elsewhere in the Contract Documents.

§ 8.6 Notice in electronic format, pursuant to Article 1 of AIA Document A201–2017, may be given in accordance with AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, if completed, or as otherwise set forth below:

(If other than in accordance with AIA Document E203–2013, insert requirements for delivering notice in electronic format such as name, title, and email address of the recipient and whether and how the system will be required to generate a read receipt for the transmission.)

§ 8.7 Other provisions:

ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS

§ 9.1 This Agreement is comprised of the following documents:

- .1 AIA Document A101™–2017, Standard Form of Agreement Between Owner and Contractor
- .2 AIA Document A101™–2017, Exhibit A, Insurance and Bonds
- .3 AIA Document A201™–2017, General Conditions of the Contract for Construction
- .4 AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, dated as indicated below:
(Insert the date of the E203–2013 incorporated into this Agreement.)

- .5 Drawings

Number

Title

Date

- .6 Specifications

Section

Title

Date

Pages

- .7 Addenda, if any:

Number

Date

Pages

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

- .8 Other Exhibits:

(Check all boxes that apply and include appropriate information identifying the exhibit where required.)

Init.

[] AIA Document E204™–2017, Sustainable Projects Exhibit, dated as indicated below:
(Insert the date of the E204-2017 incorporated into this Agreement.)

[] The Sustainability Plan:

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

[] Supplementary and other Conditions of the Contract:

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

.9 Other documents, if any, listed below:

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

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

OWNER (Signature)

(Printed name and title)

CONTRACTOR (Signature)

(Printed name and title)

Init.

/

SECTION 00 52 99 - ESCROW AGREEMENT

1.01 PROJECT MANUAL

All requirements of the Project Manual shall apply to this Section.

1.02 SCOPE

- A. All funds retained by the Owner from approved certificates for payment shall be placed in Escrow per **Indiana** Statutes.
1. Escrow Agreement Form shall be provided by the Escrow Agent and shall be acceptable to both the Owner and the Contractor.
 2. Escrow Agreement, when executed shall become a part of the Contract Documents.
 3. All escrowed funds shall be deposited in a financial institute as agreed upon by both parties to the Contract.

END OF SECTION 00 52 99

SECTION 00 61 13 – CONTRACTOR’S BOND FOR CONSTRUCTION

1.01 PROJECT MANUAL

All requirements of the Project Manual shall apply to this Section.

1.02 SCOPE

- A. The Performance Bond and Labor and Material Payment Bond shall be AIA Document A312 - 2010, comprised of two sections entitled “Performance Bond” and “Payment Bond”.
 - 1. Bonds shall be executed by an acceptable Surety Company licensed to do business in the State of **Indiana**.
 - 2. A copy of this form is bound herewith.
- B. Bonds shall be executed in an amount equal to one hundred percent (100%) of the contract amount in favor of the Owner conditioned on the full and faithful performance of the contract and full payment of all obligations arising there under.
- C. This form when fully executed becomes a part of the successful bidder’s Contract Documents.

END OF SECTION 00 61 13



AIA® Document A312™ – 2010

Performance Bond

CONTRACTOR:

(Name, legal status and address)

SURETY:

(Name, legal status and principal place of business)

OWNER:

(Name, legal status and address)

North Lawrence Community Schools
Administrative Service Center
460 W Street
Bedford, IN 47421-0729

CONSTRUCTION CONTRACT

Date:

Amount: \$

Description:

(Name and location)

North Lawrence Community Schools

BNL: Art Classroom Casework Replacement
Bedford IN

BOND

Date:

(Not earlier than Construction Contract Date)

Amount: \$

Modifications to this Bond:

None

See Section 16

CONTRACTOR AS PRINCIPAL

Company: (Corporate Seal)

Signature: _____

Name and
Title:

(Any additional signatures appear on the last page of this Performance Bond.)

SURETY

Company:

Signature: _____

Name and
Title:

(Corporate Seal)

(FOR INFORMATION ONLY — Name, address and telephone)

AGENT or BROKER:

OWNER'S REPRESENTATIVE:

(Architect, Engineer or other party:)

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.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

§ 1 The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

§ 2 If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Section 3.

§ 3 If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after

- .1 the Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Section 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;
- .2 the Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and
- .3 the Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

§ 4 Failure on the part of the Owner to comply with the notice requirement in Section 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

§ 5 When the Owner has satisfied the conditions of Section 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

§ 5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

§ 5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

§ 5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Section 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

§ 5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

- .1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or
- .2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

§ 6 If the Surety does not proceed as provided in Section 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Section 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

§ 7 If the Surety elects to act under Section 5.1, 5.2 or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication, for

- .1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
- .2 additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Section 5; and
- .3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

§ 8 If the Surety elects to act under Section 5.1, 5.3 or 5.4, the Surety's liability is limited to the amount of this Bond.

§ 9 The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors and assigns.

§ 10 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

§ 11 Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

§ 12 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

§ 13 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

§ 14 Definitions

§ 14.1 Balance of the Contract Price. The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

§ 14.2 Construction Contract. The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

§ 14.3 Contractor Default. Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

§ 14.4 Owner Default. Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

§ 14.5 Contract Documents. All the documents that comprise the agreement between the Owner and Contractor.

§ 15 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

§ 16 Modifications to this bond are as follows:

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL

Company: _____
Signature: _____
(Corporate Seal)

Name and Title: _____
Address: _____

SURETY

Company: _____
Signature: _____
(Corporate Seal)

Name and Title: _____
Address: _____



AIA® Document A312™ – 2010

Payment Bond

CONTRACTOR:

(Name, legal status and address)

SURETY:

(Name, legal status and principal place of business)

OWNER:

(Name, legal status and address)

North Lawrence Community Schools
Administrative Service Center
460 W Street
Bedford, IN 47421-0729

CONSTRUCTION CONTRACT

Date:

Amount: \$

Description:

(Name and location)

North Lawrence Community Schools

BNL: Art Classroom Casework Replacement
Bedford IN

BOND

Date:

(Not earlier than Construction Contract Date)

Amount: \$

Modifications to this Bond:

None

See Section 18

CONTRACTOR AS PRINCIPAL

Company: (Corporate Seal)

Signature:

SURETY

Company: (Corporate Seal)

Signature:

Name and

Title:

(Any additional signatures appear on the last page of this Payment Bond.)

Name and

Title:

(FOR INFORMATION ONLY — Name, address and telephone)

AGENT or BROKER:

OWNER'S REPRESENTATIVE:

(Architect, Engineer or other party:)

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.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

§ 1 The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.

§ 2 If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.

§ 3 If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Section 13) of claims, demands, liens or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety.

§ 4 When the Owner has satisfied the conditions in Section 3, the Surety shall promptly and at the Surety's expense defend, indemnify and hold harmless the Owner against a duly tendered claim, demand, lien or suit.

§ 5 The Surety's obligations to a Claimant under this Bond shall arise after the following:

§ 5.1 Claimants, who do not have a direct contract with the Contractor,

- .1 have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
- .2 have sent a Claim to the Surety (at the address described in Section 13).

§ 5.2 Claimants, who are employed by or have a direct contract with the Contractor, have sent a Claim to the Surety (at the address described in Section 13).

§ 6 If a notice of non-payment required by Section 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Section 5.1.1.

§ 7 When a Claimant has satisfied the conditions of Sections 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:

§ 7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and

§ 7.2 Pay or arrange for payment of any undisputed amounts.

§ 7.3 The Surety's failure to discharge its obligations under Section 7.1 or Section 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Section 7.1 or Section 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

§ 8 The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Section 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

§ 9 Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

§ 10 The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to, or give notice on behalf of, Claimants or otherwise have any obligations to Claimants under this Bond.

§ 11 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

§ 12 No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Section 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

§ 13 Notice and Claims to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.

§ 14 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

§ 15 Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

§ 16 Definitions

§ 16.1 Claim. A written statement by the Claimant including at a minimum:

- .1 the name of the Claimant;
- .2 the name of the person for whom the labor was done, or materials or equipment furnished;
- .3 a copy of the agreement or purchase order pursuant to which labor, materials or equipment was furnished for use in the performance of the Construction Contract;
- .4 a brief description of the labor, materials or equipment furnished;
- .5 the date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
- .6 the total amount earned by the Claimant for labor, materials or equipment furnished as of the date of the Claim;
- .7 the total amount of previous payments received by the Claimant; and
- .8 the total amount due and unpaid to the Claimant for labor, materials or equipment furnished as of the date of the Claim.

§ 16.2 Claimant. An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

§ 16.3 Construction Contract. The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

§ 16.4 Owner Default. Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

§ 16.5 Contract Documents. All the documents that comprise the agreement between the Owner and Contractor.

§ 17 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

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CONTRACTOR AS PRINCIPAL

Company: _____
Signature: _____
(Corporate Seal)

Name and Title: _____
Address: _____

SURETY

Company: _____
Signature: _____
(Corporate Seal)

Name and Title: _____
Address: _____

SECTION 00 72 00 - GENERAL CONDITIONS

1.01 PROJECT MANUAL

All requirements of the Project Manual shall apply to this Section.

1.02 SCOPE

A. The General Conditions shall be AIA Document A201 - 2017, entitled "General Conditions of the Contract for Construction".

1. A copy of which is bound herewith.

END OF SECTION 00 72 00

AIA® Document A201™ – 2017

General Conditions of the Contract for Construction

for the following PROJECT:

(Name and location or address)

North Lawrence Community Schools
BNL: Art Classroom Casework Replacement
Bedford IN

THE OWNER:

(Name, legal status and address)

North Lawrence Community Schools
Administrative Service Center
460 W Street
Bedford, IN 47421-0729

THE ARCHITECT:

(Name, legal status and address)

Kovert Hawkins Architects, Inc.
630 Walnut Street
Jeffersonville, IN 47130

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- 4 ARCHITECT**
- 5 SUBCONTRACTORS**
- 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS**
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- 9 PAYMENTS AND COMPLETION**
- 10 PROTECTION OF PERSONS AND PROPERTY**
- 11 INSURANCE AND BONDS**
- 12 UNCOVERING AND CORRECTION OF WORK**
- 13 MISCELLANEOUS PROVISIONS**

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

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

Init.

14 TERMINATION OR SUSPENSION OF THE CONTRACT

15 CLAIMS AND DISPUTES



Init.

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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 or proposal requirements.

§ 1.1.2 The Contract

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

§ 1.1.3 The Work

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

§ 1.1.4 The Project

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

§ 1.1.5 The Drawings

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

§ 1.1.6 The Specifications

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

§ 1.1.7 Instruments of Service

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

§ 1.1.8 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. The Initial Decision Maker shall not show partiality to the Owner or Contractor and shall not be liable for results of interpretations or decisions rendered in good faith.

§ 1.2 Correlation and Intent of the Contract Documents

§ 1.2.1 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent

consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

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

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

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

§ 1.3 Capitalization

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

§ 1.4 Interpretation

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

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

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

§ 1.5.2 The Contractor, Subcontractors, Sub-subcontractors, and suppliers are authorized to use and reproduce the Instruments of Service provided to them, subject to any protocols established pursuant to Sections 1.7 and 1.8, solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and suppliers may not use the Instruments of Service on other projects or for additions to the Project outside the scope of the Work without the specific written consent of the Owner, Architect, and the Architect's consultants.

§ 1.6 Notice

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

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

§ 1.7 Digital Data Use and Transmission

The parties shall agree upon protocols governing the transmission and use of Instruments of Service or any other information or documentation in digital form. The parties will use AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, to establish the protocols for the development, use, transmission, and exchange of digital data.

§ 1.8 Building Information Models Use and Reliance

Any use of, or reliance on, all or a portion of a building information model without agreement to protocols governing the use of, and reliance on, the information contained in the model and without having those protocols set forth in AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, and the requisite AIA Document G202™–2013, Project Building Information Modeling Protocol Form, shall be at the using or relying party's sole risk and without liability to the other party and its contractors or consultants, the authors of, or contributors to, the building information model, and each of their agents and employees.

ARTICLE 2 OWNER

§ 2.1 General

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

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

§ 2.2 Evidence of the Owner's Financial Arrangements

§ 2.2.1 Prior to commencement of the Work and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract. The Contractor shall have no obligation to commence the Work until the Owner provides such evidence. If commencement of the Work is delayed under this Section 2.2.1, the Contract Time shall be extended appropriately.

§ 2.2.2 Following commencement of the Work and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract only if (1) the Owner fails to make payments to the Contractor as the Contract Documents require; (2) the Contractor identifies in writing a reasonable concern regarding the Owner's ability to make payment when due; or (3) a change in the Work materially changes the Contract Sum. If the Owner fails to provide such evidence, as required, within fourteen days of the Contractor's request, the Contractor may immediately stop the Work and, in that event, shall notify the Owner that the Work has stopped. However, if the request is made because a change in the Work materially changes the Contract Sum under (3) above, the Contractor may immediately stop only that portion of the Work affected by the change until reasonable evidence is provided. If the Work is stopped under this Section 2.2.2, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, plus interest as provided in the Contract Documents.

§ 2.2.3 After the Owner furnishes evidence of financial arrangements under this Section 2.2, the Owner shall not materially vary such financial arrangements without prior notice to the Contractor.

§ 2.2.4 Where the Owner has designated information furnished under this Section 2.2 as "confidential," the Contractor shall keep the information confidential and shall not disclose it to any other person. However, the Contractor may disclose "confidential" information, after seven (7) days' notice to the Owner, where disclosure is required by law, including a subpoena or other form of compulsory legal process issued by a court or governmental entity, or by court or arbitrator(s) order. The Contractor may also disclose "confidential" information to its employees, consultants, sureties, Subcontractors and their employees, Sub-subcontractors, and others who need to know the content of such information solely and exclusively for the Project and who agree to maintain the confidentiality of such information.

§ 2.3 Information and Services Required of the Owner

§ 2.3.1 Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements,

assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities.

§ 2.3.2 The Owner 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.

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

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

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

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

§ 2.4 Owner's Right to Stop the Work

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

§ 2.5 Owner's Right to Carry Out the Work

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a ten-day period after receipt of notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such default or neglect. Such action by the Owner and amounts charged to the Contractor are both subject to prior approval of the Architect and the Architect may, pursuant to Section 9.5.1, withhold or nullify a Certificate for Payment in whole or in part, to the extent reasonably necessary to reimburse the Owner for 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. If current and future payments are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. If the Contractor disagrees with the actions of the Owner or the Architect, or the amounts claimed as costs to the Owner, the Contractor may file a Claim pursuant to Article 15.

ARTICLE 3 CONTRACTOR

§ 3.1 General

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

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

§ 3.1.3 The Contractor shall not be relieved of its obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect in the 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 2.3.4, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report to the 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 submit Claims as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.2 or 3.2.3, the Contractor shall pay such costs and damages to the Owner, subject to Section 15.1.7, as would have been avoided if the Contractor had performed such obligations. If the Contractor performs those obligations, the Contractor shall not be liable to the Owner 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. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety thereof and shall be solely responsible for the jobsite safety of such means, methods, techniques, sequences, or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely notice to the Owner and Architect, and shall propose alternative means, methods, techniques, sequences, or procedures. The Architect shall evaluate the proposed alternative solely for conformance with the design intent for the completed construction. Unless the Architect objects to the Contractor's proposed alternative, the Contractor shall perform the Work using its alternative 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 approved by the Architect in accordance with Section 3.12.8 or ordered by the Architect in accordance with Section 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

§ 3.5.1 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.

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

§ 3.6 Taxes

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

§ 3.7 Permits, Fees, Notices and Compliance with Laws

§ 3.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay 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 14 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 that an equitable adjustment be made 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, stating the reasons. If either party disputes the Architect's determination or recommendation, that party may submit a Claim 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 notify the Owner and Architect of the name and qualifications of a proposed superintendent. Within 14 days of receipt of the information, the Architect may notify the Contractor, stating whether the Owner or the Architect (1) has reasonable objection to the proposed superintendent or (2) requires additional time for review. Failure of the Architect to provide notice within the 14-day period shall constitute notice of no reasonable objection.

§ 3.9.3 The Contractor shall not employ a proposed superintendent to whom the Owner 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 and Submittal Schedules

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

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

Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.

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

§ 3.11 Documents and Samples at the Site

The Contractor shall make available, at the Project site, the Contract Documents, including Change Orders, Construction Change Directives, and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and the approved Shop Drawings, Product Data, Samples, and similar required submittals. These shall be in electronic form or paper copy, available to the Architect and Owner, and 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 how the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Architect is subject to the limitations of Section 4.2.7. Informational submittals upon which the Architect is not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Architect without action.

§ 3.12.5 The Contractor shall review for compliance with the Contract Documents, approve, and submit to the 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 the requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples, or similar submittals, unless the Contractor has specifically notified the Architect 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 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.

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

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

§ 3.13 Use of Site

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

§ 3.14 Cutting and Patching

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

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

§ 3.15 Cleaning Up

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

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

§ 3.16 Access to Work

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

§ 3.17 Royalties, Patents and Copyrights

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner and Architect harmless from loss on account thereof, but shall not be responsible for defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specifications, or other documents prepared by the Owner or Architect. However, if an infringement of a copyright or patent is discovered by, or made known to, the Contractor, the Contractor shall be responsible for the loss unless the information is promptly furnished to the 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 Architect is the person or entity retained by the Owner pursuant to Section 2.3.2 and identified as such in the Agreement.

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

§ 4.2 Administration of the Contract

§ 4.2.1 The 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.

§ 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 promptly report to the Owner (1) known deviations from the

Contract Documents, (2) known deviations from the most recent construction schedule submitted by the Contractor, and (3) defects and deficiencies observed in the Work. The 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

The Owner and Contractor shall include the Architect in all communications that relate to or affect the Architect's services or professional responsibilities. The Owner shall promptly notify the Architect of the substance of any direct communications between the Owner and the Contractor otherwise relating to the Project. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and suppliers shall be through the Contractor. Communications by and with Separate Contractors shall be through the Owner. The Contract Documents may specify other communication protocols.

§ 4.2.5 Based on the 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 13.4.2 and 13.4.3, whether or not the 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, 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 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 order 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 Owner shall notify the Contractor of any change in the duties, responsibilities and limitations of authority of the Project representatives.

§ 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 the subcontractors of a Separate Contractor.

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

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

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

§ 5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner 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 for one previously selected if the Owner or Architect makes reasonable objection to such substitution.

§ 5.3 Subcontractual Relations

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

prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

§ 5.4 Contingent Assignment of Subcontracts

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

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

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

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

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

ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

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

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

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

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

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

§ 6.2 Mutual Responsibility

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

§ 6.2.2 If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a Separate Contractor, the Contractor shall, prior to proceeding with that portion of the Work,

promptly notify the Architect of apparent discrepancies or defects in the construction or operations by the Owner or Separate Contractor that would render it unsuitable for proper execution and results of the Contractor's Work. Failure of the Contractor to notify the Architect of apparent discrepancies or defects prior to proceeding with the Work shall constitute an acknowledgment that the Owner's or Separate Contractor's completed or partially completed construction is fit and proper to receive the Contractor's Work. The Contractor shall not be responsible for discrepancies or defects in the construction or operations by the Owner or Separate Contractor that are not apparent.

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

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

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

§ 6.3 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. The Contractor shall proceed promptly with changes in the Work, unless otherwise provided in the Change Order, Construction Change Directive, or order for a minor change in the Work.

§ 7.2 Change Orders

§ 7.2.1 A Change Order is a written instrument prepared by the 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 7.3.4.

§ 7.3.4 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Architect shall determine the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable amount. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the 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 7.3.4 shall be limited to the following:

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

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

§ 7.3.6 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the 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.

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

§ 7.3.8 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the 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 may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. The Architect's order for minor changes shall be in writing. If the Contractor believes that the proposed minor change in the Work will

affect the Contract Sum or Contract Time, the Contractor shall notify the Architect and shall not proceed to implement the change in the Work. If the Contractor performs the Work set forth in the Architect's order for a minor change without prior notice to the Architect that such change will affect the Contract Sum or Contract Time, the Contractor waives any adjustment to the Contract Sum or extension of the Contract Time.

ARTICLE 8 TIME

§ 8.1 Definitions

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

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

§ 8.1.3 The date of Substantial Completion is the date certified by the 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, commence the Work prior to the effective date of insurance required to be furnished by the Contractor and Owner.

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

§ 8.3 Delays and Extensions of Time

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

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

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

§ 9.2 Schedule of Values

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

unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's subsequent Applications for Payment.

§ 9.3 Applications for Payment

§ 9.3.1 At least ten days before the date established for each progress payment, the Contractor shall submit to the 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. The application shall be notarized, if required, and supported by all data substantiating the Contractor's right to payment that the Owner or Architect require, such as copies of requisitions, and releases and waivers of liens from Subcontractors and suppliers, and shall reflect retainage if provided for in the Contract Documents.

§ 9.3.1.1 As provided in Section 7.3.9, such applications may include requests for payment on account of changes in the Work that have been properly authorized by Construction Change Directives, 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 supplier, unless such Work has been performed by others whom the Contractor intends to pay.

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

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

§ 9.4 Certificates for Payment

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

§ 9.4.2 The issuance of a Certificate for Payment will constitute a representation by the Architect to the Owner, based on the Architect's evaluation of the Work and the data in the Application for Payment, that, to the best of the Architect's knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion, and to specific qualifications expressed by the Architect. 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 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 suppliers for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or a Separate Contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
- .7 repeated failure to carry out the Work in accordance with the Contract Documents.

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

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

§ 9.5.4 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 supplier to whom the Contractor failed to make payment for Work properly performed or material or equipment suitably delivered. If the Owner makes payments by joint check, the Owner shall notify the Architect and the Contractor shall reflect such payment on its next Application 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 suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors and suppliers to ascertain whether they have been properly paid. Neither the Owner nor Architect shall have an obligation to pay, or to see to the payment of money to, a Subcontractor or supplier, except as may otherwise be required by law.

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

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

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

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

§ 9.7 Failure of Payment

If the 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' 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 shutdown, delay and start-up, plus interest as provided for in the Contract Documents.

§ 9.8 Substantial Completion

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

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

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

§ 9.9 Partial Occupancy or Use

§ 9.9.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor shall prepare and submit a list to the 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 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. 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 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, (3) a written statement that the Contractor knows of no reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment, (5) documentation of any special warranties, such as manufacturers' warranties or specific Subcontractor warranties, and (6) if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts and releases and waivers of liens, claims, security interests, or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien, claim, security interest, or encumbrance. If a lien, claim, security interest, or encumbrance remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging the lien, claim, security interest, or encumbrance, including all costs and reasonable attorneys' fees.

§ 9.10.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, 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, corrected, and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of the surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the 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;
- .3 terms of special warranties required by the Contract Documents; or
- .4 audits performed by the Owner, if permitted by the Contract Documents, after final payment.

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

ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

§ 10.1 Safety Precautions and Programs

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

§ 10.2 Safety of Persons and Property

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

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

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

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

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

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

§ 10.2.6 The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner 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, notice of the injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

§ 10.3 Hazardous Materials and Substances

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

§ 10.3.2 Upon receipt of the Contractor's notice, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor and Architect the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of the material or substance or who are to perform the task of removal or safe containment of the material or substance. The Contractor 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 by the amount of the Contractor's reasonable additional costs of shutdown, delay, and start-up.

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

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

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

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

§ 10.4 Emergencies

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

ARTICLE 11 INSURANCE AND BONDS

§ 11.1 Contractor's Insurance and Bonds

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

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

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

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

§ 11.2 Owner's Insurance

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

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

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

§ 11.3 Waivers of Subrogation

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

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

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

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

§ 11.5 Adjustment and Settlement of Insured Loss

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

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

ARTICLE 12 UNCOVERING AND CORRECTION OF WORK

§ 12.1 Uncovering of Work

§ 12.1.1 If a portion of the Work is covered contrary to the 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, the Contractor shall be entitled to an equitable adjustment to

the Contract Sum and Contract Time as may be appropriate. If such Work is not in accordance with the Contract Documents, the costs of uncovering the Work, and the cost of correction, shall be at the Contractor's expense.

§ 12.2 Correction of Work

§ 12.2.1 Before Substantial Completion

The Contractor shall promptly correct Work rejected by the Architect or failing to conform to the requirements of the Contract Documents, discovered before Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the 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 any applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of notice from the Owner to do so, unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the one-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner or Architect, the Owner may correct it in accordance with Section 2.5.

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

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

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

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

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

§ 12.3 Acceptance of Nonconforming Work

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

ARTICLE 13 MISCELLANEOUS PROVISIONS

§ 13.1 Governing Law

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

§ 13.2 Successors and Assigns

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

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

§ 13.3 Rights and Remedies

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

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

§ 13.4 Tests and Inspections

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

§ 13.4.2 If the Architect, Owner, or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection, or approval not included under Section 13.4.1, the 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 13.4.3, shall be at the Owner's expense.

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

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

§ 13.4.5 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.

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

§ 13.5 Interest

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

ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT

§ 14.1 Termination by the Contractor

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

- .1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped;
- .2 An act of government, such as a declaration of national emergency, that requires all Work to be stopped;
- .3 Because the 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 reasonable evidence as required by Section 2.2.

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

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

§ 14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, or their agents or employees or any other persons or entities performing portions of the Work because the Owner has repeatedly failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days' notice to the Owner 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 or suppliers in accordance with the respective agreements between the Contractor and the Subcontractors or suppliers;
- .3 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- .4 otherwise is guilty of substantial breach of a provision of the Contract Documents.

§ 14.2.2 When any of the reasons described in Section 14.2.1 exist, and upon certification by the Architect that sufficient cause exists to justify such action, the Owner may, without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven days' notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

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

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

§ 14.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Architect's services and expenses made necessary thereby, and other damages incurred by the Owner and not expressly waived, such excess shall be paid to the Contractor. If such costs and damages exceed the unpaid balance,

the Contractor shall pay the difference to the Owner. The amount to be paid to the Contractor or Owner, as the case may be, 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 under Section 14.3.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent

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

§ 14.4 Termination by the Owner for Convenience

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

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

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

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

ARTICLE 15 CLAIMS AND DISPUTES

§ 15.1 Claims

§ 15.1.1 Definition

A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, a change in the Contract Time, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim. This Section 15.1.1 does not require the Owner to file a Claim in order to impose liquidated damages in accordance with the Contract Documents.

§ 15.1.2 Time Limits on Claims

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

§ 15.1.3 Notice of Claims

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

§ 15.1.3.2 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party. In such event, no decision by the Initial Decision Maker is required.

§ 15.1.4 Continuing Contract Performance

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

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

§ 15.1.5 Claims for Additional Cost

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

§ 15.1.6 Claims for Additional Time

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

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

§ 15.1.7 Waiver of Claims for Consequential Damages

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

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

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

§ 15.2 Initial Decision

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

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

Initial Decision Maker's sole discretion, it would be inappropriate for the Initial Decision Maker to resolve the Claim.

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

§ 15.2.4 If the Initial Decision Maker requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of the request, and shall either (1) provide a response on the requested supporting data, (2) advise the Initial Decision Maker when the response or supporting data will be furnished, or (3) advise the Initial Decision Maker that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Initial Decision Maker will either reject or approve the Claim in whole or in part.

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

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

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

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

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

§ 15.3 Mediation

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

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

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

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

§ 15.4 Arbitration

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

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

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

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

§ 15.4.4 Consolidation or Joinder

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

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

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

SECTION 00 73 01 - SUPPLEMENTARY GENERAL CONDITIONS

Unless otherwise provided in these Supplemental Conditions, all work shall be governed by the terms of AIA Document A201 - 2017, entitled "General Conditions of the Contract for Construction". The following Supplemental Conditions, modify, delete from and add to AIA A201. Where an Article Paragraph, Subparagraph or Clause of AIA A201 is modified, deleted from or added to by these Supplemental Conditions, the unaltered provisions of that Article, Paragraph, Subparagraph or Clause shall remain in full force and effect. To the extent that there is any conflict or ambiguity between AIA A201 and these Supplemental Conditions, then these Supplemental Conditions shall control.

ARTICLE 1 - GENERAL PROVISIONS

1.1.1 THE CONTRACT DOCUMENTS

Add the following:

The Contract Documents also include the following bid documents:

1. Proposal Form (Form 96, Part I and II) – Contractor's Bid for Public Works.

1.1.5 THE DRAWINGS

Add the following Paragraphs:

- | | |
|---------|---|
| 1.1.5.1 | The Drawings are a graphic representation intended to convey the design intent of the Project. They are a 2-dimensional representation of a 3-dimensional Project, and they do not provide a detail for every construction condition of the project. The Drawings are a small scale representation of complex construction assemblies and components, and not every element of the Project can be indicated in these small scale representations. The Drawings are not an instruction manual, nor are they assembly instructions. They are meant for use by experienced, competent construction professionals with the ability to read, interpret, co-ordinate, interpolate and infer information from them. The Drawings do not indicate every component and assembly necessary to construct the Project. It is the Contractor's responsibility to provide all components and assemblies necessary to provide a safe, complete and finished Project, which is reasonably fit for its intended purpose, whether or not such components and assemblies are detailed on the Drawings. |
| 1.1.5.2 | In general, all drawings are diagrammatic and schematic, and cannot indicate every offset, fitting, and accessory, nor can they indicate the field coordination work required to avoid all conflict with other trades. Contractor shall check drawings, shop drawings, and actual equipment of other trades to verify spaces available and make reasonable modifications, as directed, without extra cost to Owner; maintain headroom and other requirements in all areas; and where such requirements appear inadequate, notify Architect/Engineer before proceeding. |

1.2 CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS

Add the following sentence to Paragraph 1.2.1:

It is the Contractor's responsibility to provide all work necessary for a complete and finished Project of first class quality. The Contractor will work skillfully, carefully and will perform in all respects in a workmanlike manner.

Add the following Paragraphs 1.2.2.1 and 1.2.3.1:

- 1.2.2.1 The Drawings are not intended to define the scope of work among various trades, sub-contractors,

material suppliers and vendors. The sheet numbering system is for the convenience of the Architect and the Architect's consultants only, and is not intended to define a sub-contractor's or material supplier's scope of work. Information is detailed, described and located at various locations throughout the Drawings. No consideration will be given to requests for change orders which relate to a failure of the Contractor, or the Contractor's sub-contractors and suppliers to obtain and review a complete set of Contract Documents during bidding, nor to maintain a complete set of Contract Documents during construction. Where bidding is separated into a number of different prime contracts, this paragraph applies to each of the separate prime contracts.

- 1.2.3.1 In the event of conflicts or discrepancies among the Contract Documents, interpretations will be based on the following priorities.
1. The Agreement
 2. Addenda, with those of later date having precedence over those of earlier date.
 3. The Supplementary Conditions.
 4. The General Conditions of the Contract for Construction.
 5. Drawings and Specifications.

In the case of an inconsistency between Drawings and Specifications or within either Document not clarified by addendum, the better quality or greater quantity of Work shall be provided in accordance with the Architect's interpretation. The Contractor has a duty to inquire about possible ambiguities and inconsistencies which are patent or obvious during the bidding process, and will not receive additional compensation or be excused from resulting difficulties in performance for failure to point out any inconsistencies after that point. In the case of disregard by the Contractor of such inconsistencies and ambiguities, the Architect may require the Contractor to remove and correct work which has been installed at no additional cost to the Owner.

ARTICLE 2 - OWNER

2.3 INFORMATION AND SERVICES REQUIRED OF THE OWNER

- 2.3.4 DELETE Subparagraph 2.3.4 in its entirety and replace with the following:

Neither the Owner nor the Architect shall be liable for inaccuracies or omissions contained in any surveys for the site of the Project, nor shall any inaccuracies or omissions in such items relieve the Contractor of its responsibility to perform the Work in accordance with the Contract Documents.

ARTICLE 3 - CONTRACTOR

3.3 SUPERVISION AND CONSTRUCTION PROCEDURES

- 3.3.4 ADD the following new Subparagraph:

The Contractor shall maintain total control of and shall be fully responsible for the Contractor's employees, agents, representatives, workers, Subcontractors, sub-subcontractors and other such persons or entities, and shall remove from the Site any such persons or entities not in compliance with the Contract Documents as interpreted by the Architect or the Owner. The Contractor shall assure harmonious labor relations at and adjacent to the Site so as to prevent any delays, disruption or interference to the Work. The Contractor shall prevent strikes, sympathy strikes, slowdowns, work interruption, jurisdictional disputes or other labor disputes resulting for any reason whatsoever, from the acts or failure to act, of the employees of the Contractor or any of its Subcontractors material suppliers, or other such persons or entities. The Contractor agrees that it will bind and require all of its Subcontractors, material suppliers and other such persons or entities to agree to all of the provisions of

this subparagraph. If the Contractor or any of its Subcontractors, material suppliers or other such persons or entities fail to fulfill any of the covenants set forth in the Subparagraph, the Contractor will be deemed to be in default and substantial violation of the Contract Documents.

3.5 WARRANTY

Add the following new Subparagraphs 3.5.3, 3.5.4, 3.5.5, 3.5.6, 3.5.7, 3.5.8, 3.5.9 and 3.5.10

- 3.5.3 For a period of one (1) year from the date of Substantial Completion, the Contractor warrants as provided in Subparagraph 3.5.1 and further warrants to the Owner, and the Architect that (a) all movable or adjustable work shall remain in working order, including hardware, doors, windows, apparatus, machinery, mechanical and electrical equipment and (b) the Contractor's portion of the Work shall be waterproof and weatherproof in every respect.
- 3.5.4 In addition to all the Contractor warranties and obligations to correct defective Work provided by law or as set forth in any of the Contract Documents, the Contractor agrees, upon notice from the Owner or the Architect, to pay for, and if requested, correct, repair, restore and cure any damage or injury, whenever the same shall occur or appear, resulting from any defects, omissions or failure in workmanship or materials, and indemnify, hold harmless, and defend the Owner against any and all claims, losses, costs, damages and expenses, including attorneys' fees, suffered by the Owner as a result of such damage or injury, whenever such damage or injury shall occur or appear.
- 3.5.5 The commencement and terms of the guarantees and warranties required by the Contract Documents shall not in any manner be affected by any delay in the commencement, progress or completion of the Work, regardless of the cause therefore.
- 3.5.6 The foregoing guarantees and warranties shall not shorten any longer warranty or liability period provided for by law or in the Contract Documents or otherwise received from the Contractor or any Subcontractor, material supplier or manufacturer, nor supersede the terms of any special warranty given by the Contractor, nor shorten any period of the Contractor's legal liability for defective Work, but shall be in addition thereto.
- 3.5.7 Notwithstanding anything to the contrary contained herein with respect to warranties, it is understood and agreed that the foregoing warranties and guarantees shall not affect, limit or impair the Owner's right against the Contractor with regard to latent defects in the Work which do not appear within the applicable warranty period and which could not, by the exercise of reasonable care and due diligence, be ascertained or discovered by the Owner within such warranty period. The Contractor shall correct and cure any such latent defects which are reported to the Contractor by the Owner in writing within ninety (90) days after such latent defect first appears or could, by the exercise of reasonable care and due diligence, be ascertained or discovered by the Owner.
- 3.5.8 Neither the acceptance of any of the Work by the Owner, in whole or in part, nor any payment, either partial or final, by the Owner to the Contractor, shall constitute a waiver by the Owner of any claims against the Contractor for defects in the Work, whether latent or apparent, and no such payment or acceptance of the Work by the Owner shall release or discharge the Contractor of the Contractor's surety, if any, from any such claims for breach of such warranties.
- 3.5.9 Upon completion of the Work, the Contractor shall furnish the Owner with all written warranties, guarantees, operating manuals, all shop drawings and submittals used in the project relative to equipment installed, and if requested by the Architect, a complete set of reproducible drawings with all field changes noted on them relating to the improvements constructed.

- 3.5.10 If required by the Owner or the Architect, the Contractor shall deliver to the Owner a signed affidavit stating that the Work has been constructed in accordance with the Contract Documents. If such affidavit is required, final payment or a final certificate for payment shall not be tendered until such affidavit has been delivered to the Owner.

3.6 TAXES

- 3.6.1 ADD the following new Subparagraph:

Material and properties purchased by contracts with the Owner that become a permanent part of the structure or facilities constructed are not subject to the Indiana Gross Retail Tax (Sales Tax). The Contractor shall obtain a copy of the Owner's exemption certificate and then issue copies of this certificate to his suppliers when acquiring materials and properties for use on the Project. The Contractor shall enforce this exemption clause for his purchases and for those of his Subcontractors.

3.8 ALLOWANCES

Refer to Section 01 21 13 - Cash Allowances for further provisions on this subject.
Refer to Section 01 21 16- Contingency Allowance for further provisions on this subject.

3.12 SHOP DRAWINGS, PROJECT DATA AND SAMPLES

Refer to Section 01 33 00 - Submittal Procedures for further provisions on this subject.

3.13 USE OF SITE

ADD the following new Subparagraphs 3.13.1 and 3.13.2:

- 3.13.1 If the Owner requires the contractor to relocate materials or equipment which have been stored on the Site or within the Project, the Contractor shall relocate such materials or equipment at no additional cost to the Owner.
- 3.13.2 The Contractor is solely responsible for its Site access. The Contractor shall keep all roads, walks, ramps and other areas on and adjacent to the Site in good working order and condition and free from obstructions which might present a hazard to or interference with traffic or the public. When construction operations necessitate the closing of traffic lanes, the Contractor shall be responsible for arranging such closings in advance with the authorities having jurisdiction, the Owner, and adjacent property Owners. The Contractor shall provide adequate barricades, signs and other devices for traffic guides and public safety. Contractor shall maintain all adjacent streets to that Project in a clean condition and shall clean all dirt and mud from the Project and from such adjacent street on a daily basis.

3.14 CUTTING AND PATCHING

Refer to Section 01 73 29 - Cutting and Patching for further provisions on this subject.

3.15 CLEANING UP

Refer to Section 01 74 23 - Cleaning for further provisions on this subject.

ARTICLE 4 – ARCHITECT

4.2 ADMINISTRATION OF THE CONTRACT

ADD the following new Subparagraphs 4.2.2.1:

- 4.2.2.1 The Owner is entitled to reimbursement from the Contractor for amounts paid to the Architect for site

visits made necessary by the fault of the Contractor or by defects or deficiencies in the Work.

ARTICLE 6 - CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

6.2 MUTUAL RESPONSIBILITY

ADD the following new Subparagraphs 6.2.6 and 6.2.7:

- 6.2.6 No Contractor, other Contractor, or Subcontractor, shall be entitled or permitted to sue or make a claim against the Owner or the Architect on account of any delay, disruption or acceleration or damage related thereto. If, however, the Owner or the Architect is sued or receives a claim from a Contractor or other Contractor on account of any alleged delay, disruption, interference or acceleration or damage related thereto caused, or alleged to be caused, in whole or in part, by the Contractor, the Contractor shall defend and indemnify the Owner and the Architect therefore, and reimburse them for their attorney's fees, costs and expenses.
- 6.2.7 Inasmuch as the completion of the Project within the Contract Time is dependent upon the close and active cooperation of all those engaged therein, it shall be expressly understood and agreed that the Contractor shall lay out and install its Work at such time or times and in such manner as not to delay, interfere, or disrupt the Work of others.

ARTICLE 7 - CHANGES IN THE WORK

7.1 GENERAL

Add the following new Subparagraphs 7.1.4 and 7.1.5:

- 7.1.4 Consultants to Architect or Owner:
1. Consultants to Architect or Owner shall have NO authority to modify Contract requirements in the Scope of Work or Contract Time.
 2. Consultants to Architect or Owner shall have no direct communication with Contractor or subcontractors, suppliers and vendors to Contractor without the express consent of the Architect.
 3. Any direct communication authorized by the Architect shall be for clarifications of the Work only and shall not act to authorize any changes in the Scope of Work, Contract Sum or Contract Time.
- 7.1.5 The overhead, profit and commission percentages included in a Change Order or Construction Change Directive must not exceed the maximums given at the end of this paragraph, and will be considered to include, but not be limited to, insurance (other than Workman's Compensation Insurance, FICA, Medicare and FUTA), bonds, small tools, incidental job burdens, supervisory expense, project management expense, clerical expense, preparatory expense and general office expense. Workmen's Compensation Insurance, and employment taxes under FICA, Medicare and FUTA are to be itemized separately and no percentage for overhead, profit and commission will be allowed on them. The percentages for overhead, profit and commission will be negotiated and may vary according to the nature, extent and complexity of the work involved, but not to exceed the maximum percentages shown. Not more than three percentages will be allowed regardless of the number of tiers of sub-contractors; that is, the markup on work subcontracted by a subcontractor will be limited to one overhead percentage and one profit percentage in addition to the prime contractor's commission percentage. On proposals covering both increases and decreases in the amount of the contract, the overhead, profit, and where applicable, commission, will be computed on the net change only. On proposals for decreases in the amount of the contract, the overhead and profit shall be added to the decrease in direct cost:

<i>Description</i>	<i>Overhead</i>	<i>Profit</i>	<i>Commission</i>
To Contractor on work performed by other than his/her own forces	0%	0%	10%
To Contractor for that portion of work performed by his/her own forces	10%	10%	0%
To Sub-contractor for that portion of work performed by his/her own forces	10%	10%	0%

7.3 CONSTRUCTION CHANGE DIRECTIVES

Add the following new Subparagraph to 7.3.4.6:

- 7.3.4.6 Amount for overhead and profit as set forth in this Agreement shall be in accordance with the schedule set forth in Article 7.1.5.

ARTICLE 8 - TIME

8.2 PROGRESS AND COMPLETION

ADD the following Subparagraphs 8.2.4, 8.2.5 and 8.2.6:

- 8.2.4 Whenever it may be useful or necessary for the Owner to do so, the Owner may take possession of the Project or parts thereof at any time that it is determined by the Architect that the Work has been completed to a point where the Owner may occupy or use said Project, or parts thereof, without interference, delay or disruption to the continued execution of the work. The Owner may at such time install furnishings and equipment as it sees fit or may at its discretion hire other Contractors for this purpose. Such use or occupation shall not relieve the Contractor of these warranty obligations as provided in the Contract Documents nor shorten their commencement dates.
- 8.2.5 Except as otherwise provided herein, substantial completion of work shall be within the number of calendar days stated by the Contractor on the Proposal Form and shall become a contract obligation. The time for completion of the work shall be extended for the period of any excusable delay, which term shall include only those delays directly caused by any of the reasons enumerated in the following subparagraph 8.3.2 and 8.3.3.
- 8.2.6 Completion shall be understood to be substantially complete for the Owner's beneficial occupancy, with only minor Punch List" items yet to be completed and items such as balancing of heating system, etc., which cannot be completed due to climatic conditions.

8.3 DELAYS AND EXTENSIONS OF TIME

DELETE Subparagraph 8.3.1 in its entirety and substitute the following:

- 8.3.1 If the Work is delayed, disrupted, interfered with or constructively accelerated (hereinafter and collectively referred to as "Hindrances" or "Hindrances") at any time by any act or neglect of the Owner, the Architect, other Contractors or Subcontractors, or any of their employees, or by changes ordered in the Work, fire, unusual delay in transportation, unavoidable casualties, or other cause beyond the Contractor's control as elsewhere provided in the Contract Documents, then the Contract Time shall be increased by Change Order for such reasonable time as the Architect may determine.

DELETE Subparagraph 8.3.3 in its entirety and substitute the following:

- 8.3.3 Whether or not any Hindrance shall be the basis for an increase in the Contract Time, the Contractor shall have no claim against the Owner or the Architect for an increase in the Contract Sum, nor a claim against the Owner or the Architect for a payment or allowance of any kind for damage, loss or expense resulting from any Hindrance. As between the Contractor and the Owner, except for acts constituting intentional or grossly unreasonable interference by the Owner or the Architect with the Contractor's performance of the Work when such acts continue after the Contractor's written notice to the Owner of such interference or disruption, the Contractor shall assume the risk of all Hindrances arising from any and all causes whatsoever, including without limitation, those due to any act or omission of the Owner or the Architect, except only to the extent that an increase to the Contract Time may be due to the Contractor as expressly provided for in this Subparagraph. The Contractor shall bear all costs, expenses and liabilities in connection with Hindrances and all costs, expenses and liabilities of any nature whatsoever, whether or not provided for in the Contract Documents, shall conclusively be deemed to have been within the contemplation of the parties. The only remedy available to the Contractor shall be an increase in the Contract Time.

ADD the following new Subparagraphs 8.3.4, 8.3.5 and 8.3.6:

- 8.3.4 The Owner's exercise of any of its rights under the Contract Documents, including but not limited to its rights regarding changes in the Work, regardless of extent or number of such changes, performance of separate Work or carrying of the Work by the Owner or the Architect, directing overtime or changes in the sequence of the Work, withholding payment or otherwise exercising its rights hereunder, or exercising any of its remedies of suspension of the Work or requirements of correction or re-execution of any defective Work shall not, under any circumstances, be construed as intentional interference or disruption with the Work.
- 8.3.5 No increase in the Contract Time shall be granted for any Hindrance resulting from unsuitable ground conditions, inadequate forces, the failure of the Contractor to place orders for equipment or materials sufficiently in advance to insure their delivery when needed, or any Hindrance resulting from interruptions to or suspensions of the Work so as to enable others to perform their Work, other than as specifically provided elsewhere in the Contract Documents.
- 8.3.6 If the Contractor causes a Hindrance to the Work so as to cause any damage to the Owner or any damages for which the Owner may become liable, the Contractor shall be liable therefore and the Owner may withhold from any amount yet due the Contractor the amount reasonably required to compensate the Owner for such damages, if the amount of compensation exceeds the amount yet paid to the Contractor, the Contractor shall pay the difference to the Owner immediately upon demand.

ARTICLE 9 - PAYMENTS AND COMPLETION

9.2 SCHEDULE OF VALUES

Add the following new Subparagraph 9.2.1:

- 9.2.1 Contractor shall obtain written concurrence in such schedule of values from the Surety furnishing any Performance Bond and Labor and Materials Payment Bond. Copy of written concurrence by the Surety shall be submitted by the time of written submission.

9.3 APPLICATIONS FOR PAYMENT

ADD the following new Subparagraphs: 9.3.1.3, 9.3.1.4, 9.3.1.5, and 9.3.1.6:

- 9.3.1.3 The Owner will pay ninety-five percent (95%) of the amount due the Contractor on Account of progress payments for the entire period of the Contract.
- 9.3.1.4 A subcontractor shall be paid ninety-five percent (95%) of the earned sum by the Contractor for the entire period of the Contract.
- 9.3.1.5 The Owner, Contractor and the Architect/Engineer shall cooperate to the end that retentions shall be paid promptly when all conditions of the Contract have been met.
- 9.3.1.6 Applications for payment, subsequent to the first application, shall be accompanied by Waivers of Lien from the Contractor and all major subcontractors, suppliers, and vendors.

ADD the following at the end of Subparagraph 9.3.3:

- 9.3.3 This provision shall not be construed as relieving the Contractor from the sole responsibility and expense for the care and protection of materials and Work upon which payments have been made or the restoration of any stolen, destroyed or damaged Work, or as a waiver of the right of the Owner to require the fulfillment of all of the terms of the Contract Documents.

9.5 DECISIONS TO WITHHOLD CERTIFICATION

ADD the following new Subparagraph 9.5.5:

- 9.5.5 If any claim or lien is made or filed with or against the Owner, the Architect, the Project, or the Contract Sum by any persons or entity claiming that the Contractor, Subcontractor, or other person for whom the Contractor is responsible has failed to make payment for labor, services, materials, equipment, taxes or other items or obligations furnished or incurred in connection with the Work, or if at any time there shall be any evidence of such non-payment of any claim or lien which is chargeable to the Contractor, or if the Contractor, Subcontractor, or other person or entity for whom the Contractor is responsible caused damage to any Work on the project, or if the Contractor fails to perform or is otherwise in default under any terms or provisions of the Contract, the Owner shall have the right to retain from any payment then due or thereafter an amount which it deems sufficient to (1) satisfy, discharge and/or defend against such claim, lien, or action brought for judgment which may be recovered thereon, (2) make good any such non-payment, damage, failure, or default (3) compensate the Owner and Architect for any and all losses, liabilities, damages, costs, and expenses, including legal fees and costs, which may be sustained or incurred by either or both of them in connection therewith. The Owner shall have the right to apply and charge against the Contractor retained amounts as may be required for these purposes. If the amount retained is insufficient, the Contractor shall be liable for the difference and pay it directly to the Owner.

9.6 PROGRESS PAYMENTS

DELETE Subparagraph 9.6.6 in its entirety and replace with the following:

- 9.6.6 No recommendation or certification of a progress payment, any progress payment, final payment, or any partial or entire use or occupancy of the Project by the Owner, shall constitute acceptance of any Work not in accordance with the Contract Documents.

ADD the following new Subparagraph 9.6.8:

- 9.6.8 On all Contracts totaling two hundred thousand dollars (\$200,000.00) or more, an escrow account shall be established in a financial institution, as escrow agent, selected by mutual agreement between the

Contractor and the Owner at the time Contracts are executed. The establishing of the escrow account shall be in compliance with the requirement of Indiana Code 36-1-12-14.

1. The Escrow Agent shall invest all escrowed principal in obligations selected by the Escrow Agent.
2. The Escrow Agent shall hold the escrowed principal and income until receipt of notice from the Owner and the Contractor, or the Contractor and the Subcontractor, specifying the part of the escrowed principal to be released from the escrow and to whom that portion is to be released. After receipt of the notice, the Escrow Agent shall remit the designated part of escrowed principal and the same proportion of then escrowed income.
3. The Escrow Agent shall be compensated for its services as the parties may agree in the amount not to exceed fifty percent (50%) of the escrowed income of the escrow amount.
4. See Section 9.10 - Final Completion and Final Payment, for provisions of retainage in escrow and final payment.

9.9 PARTIAL OCCUPANCY OR USE

- 9.9.1 DELETE the phrase "when such portion is designated by separate agreement with the Contractor" in line 2; DELETE the last two sentences in Subparagraph 9.9.1.

9.10 FINAL COMPLETION AND FINAL PAYMENT

- 9.10.1 ADD the following sentence at the end of the Subparagraph:

"Provided, however, that final payment shall not be due and payable until sixty-one (61) days after the Work has been completed and the Contract fully performed".

- 9.10.4 ADD the following at the end of Subparagraph 9.10.4:

"Final payment constituting the unpaid balance of the Contract Sum shall be paid to the Contractor in full, including any retainage *or escrowed principal and escrowed income by the escrow agent*, no less than sixty-one (61 days) following the date of substantial completion. If at any of that time there are any remaining uncompleted items, an amount equal to two hundred percent (200%) of the value of each item as determined by the Architect shall be withheld until said items are completed and a Final Certificate of Payment is issued by the Architect".

DELETE Subparagraph 9.10.5 in its entirety and replace with the following:

- 9.10.5 The Contractor's obligation to perform the Work and complete the Project in accordance with the Contract Documents shall be absolute. Neither approval of any progress or final payment, nor the issuance of a Certificate of Substantial Completion, nor any payment by the Owner to the Contractor under the Contract Documents, nor any use or occupancy of the Project or any part thereof by the Owner, nor any act of acceptance by the Owner shall constitute an acceptance of Work not in accordance with the Contract Documents, nor does it constitute a waiver of any claims that arise from: (1) liens, claims, security interests or encumbrances arising out of the contract or settled; or (2) terms of any warranties in favor of the Owner that are provided pursuant to the Contract Documents or otherwise.

ARTICLE 10 - PROTECTION OF PERSONS AND PROPERTY

DELETE Subparagraph 10.1 in its entirety and replace with the following:

- 10.1 The Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work and in connection with the Contractor's performance of any work other than the Work.

10.2 SAFETY OF PERSONS AND PROPERTY

10.2.1 REPLACE the words "reasonable" with the phrase "all necessary" in both instances in line 1.

ADD the following to Subparagraph 10.2.1:

- .4 Protect excavation, trenches, buildings and grounds from all water damage. Furnish necessary equipment to provide this protection during the term of the Contract. Construct and maintain necessary temporary drainage to keep excavations free of water.
- .5 Provide protection of the Work against wind, storms, cold and heat. At the end of each day, cover new Work which may be damaged;
- .6 Provide adequately-engineered shoring and bracing required for safety and for the proper execution of the Work and have same removed when the Work is completed; and
- .7 Protect, maintain and restore benchmarks, monuments and other reference points affected by the Work. If benchmarks, monuments or other reference points are displaced or destroyed, points shall be re-established and markers reset under the supervision of a licensed surveyor, who shall furnish certificates of its work.

10.2.5 INSERT the work "solely" after the word "loss" in the clause which reads "except damage or loss attributable to acts or omissions of the Owner or Architect...".

ADD the following new Subparagraphs 10.2.9, 10.2.10 and 10.2.11:

- 10.2.9 "The Project is designed to be self-supporting and stable after the Work is fully completed. Except as otherwise provided, it is solely the Contractor's responsibility to determine erection procedures and sequences, and to insure the safety of the Project and its component parts during erection. This includes, but is not limited to, the addition or modification of whatever temporary bracing, guys or tie downs may be necessary. Such material shall be removed after completion of the Work".
- 10.2.10 The Contractor shall conform with the United States Department of Labor and the State Division of Labor Occupational Safety and Health Administration regulations.
- 10.2.11 The Contractor shall have the Hazard Communication Program in effect with all their personnel working on the project. All Material Data sheets should be current as required by law.

ARTICLE 11 - INSURANCE AND BONDS

11.1 CONTRACTOR'S INSURANCE AND BONDS

11.1.1 ADD the following at the end of the subparagraph:

- .1 The form of such bonds shall be acceptable to Owner and in compliance with **Indiana** Statute:
- .2 The Bonds shall remain in effect for a period of not less than one (1) year following the date of Substantial Completion and/or time required to resolve any items of incomplete Work and the payment to any owed amounts, whichever time period extends the longer;
- .3 The amount of the Performance Bond and the Labor and Material Bond shall each be 100% of the Contract Sum; and
- .4 The Contractor shall require the attorney in fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of his power of attorney indicating the momentary limit of such power.
- .5 The required insurance shall be written for not less than the limits stated in the Owner's Instructions to the Architect (AIA Document G612, Part B) as included in the Project Manual or as required by

law, whichever is greater and with the Owner, Architect, Consultants, and Engineers or their assigned names as "Additional Insureds" "Primary" on the insurance policy. Coverages shall be maintained without interruptions from date of commencement, of the work, until date of final payment and termination of any coverage required to be maintained after final payment.

Add the following new Subparagraph 11.1.5 and 11.1.6:

- 11.1.5 The Contractor shall furnish one copy of Certificate of Insurance and Bonds required of each copy of the agreement, which shall specifically set forth evidence of all coverages required. Furnish Owner copies of any endorsements subsequently issued amending coverage limits.
- 11.1.6 The Contractor shall keep the surety informed of the progress of the Work, changes in the Work, requests for release of retainage, request for final payment and any other information required by the surety.

11.2 OWNER'S INSURANCE

- 11.2.1.1 Any errors and omissions insurance maintained by the Architect or the Architect's Consultants shall not serve to exclude the Architect or Architect's Consultant from the mutual waiver of rights outlined in paragraph 11.3.7. The waiver of rights is given in exchange for property insurance covering the work.
- 11.2.2 Change the second sentence to include after sub-subcontractors: "...and Architects and Engineers of Record".

ARTICLE 13 – MISCELLANEOUS PROVISIONS

13.2 SUCCESSORS AND ASSIGNS

- 13.2.1 DELETE the last two sentences of this Subparagraph.
ADD the following as the last two sentences of the Subparagraph:
- "Contractor shall not assign the Contract or any portion thereof without the written consent of Owner. Owner is entitled to assign the Contract or any portion thereof".
- 13.2.2 DELETE this Subparagraph in its entirety.

13.4 TESTS AND INSPECTIONS

- 13.4.7 ADD the following new Subparagraph:
- Neither the observations of the Architect, its administration of the Contract Documents, nor inspections tests or approvals by persons other than the Contractor shall relieve the Contractor from its obligation to perform the Work in accordance with the Contract Documents.
- 13.6 ADD the following new Paragraph:
- The Owner will require the Contractor to conduct a background check for criminal history for all workers on the project in compliance with Indiana Code 20-5-2-7 and 20-5-2-8.
- "The Contractor shall provide, if awarded the right to provide services or materials under this agreement, a list of all personnel used by or on behalf of the Contractor, whether

employed by them or not, who will be engaged in the providing of services or delivery of materials and goods.

With said list of persons shall be provided written evidence of a criminal record search with respect to all persons on the list dated within thirty (30) days of the said date of the Contract and extending at least twenty (20) years prior.

Contractor agrees that no person will be providing services who has any criminal conviction for any type of behavior that would place the students or staff at risk.

If evidence of such behavior occurs after this initial search, but during their employment on site, such worker shall be removed immediately from the site and shall be banned from the jobsite for the duration of the project.

Evidence of behavior that is prohibited would include, but not limited to, the following:

- (1) Murder [IC 34-42-1-1].
 - (2) Causing suicide [IC 35-42-1-2].
 - (3) Assisting suicide [IC 35-42-1-2.5].
 - (4) Voluntary manslaughter [IC 35-42-1-3].
 - (5) Reckless homicide [IC 35-42-1-5].
 - (6) Battery [IC 35-42-2-1] unless ten (10) years have elapsed from the date the individual was discharged from probation, imprisonment, or parole, whichever is later.
 - (7) Aggravated battery [IC 35-42-2-1.5].
 - (8) Kidnapping [IC 35-42-3-2].
 - (9) Criminal confinement [IC 35-42-3-3].
 - (10) A sex offense under [IC 35-42-4].
 - (11) Carjacking [IC 35-42-5-2].
 - (12) Arson [IC 35-43-1-1] unless ten (10) years have elapsed from the date the individual was discharged from probation, imprisonment, or parole, whichever is later.
 - (13) Incest [IC 35-46-1-3].
 - (14) Neglect of a dependent [IC 35-46-1-4(a)(1) and IC 35-46-1-4(a)(2)] unless ten (10) years have elapsed from the date the individual was discharged from probation, imprisonment, or parole, whichever is later.
 - (15) Child selling [IC 35-46-1-4(b)].
 - (16) Contributing to the delinquency of a minor [IC 35-46-1-8] unless ten (10) years have elapsed from the date the individual was discharged from probation, imprisonment, or parole, whichever is later.
 - (17) An offense involving a weapon under IC 35-47 unless ten (10) years have elapsed from the date the individual was discharged from probation, imprisonment, or parole, whichever is later.
 - (18) An offense relating to controlling substances under IC 35-48-4 unless ten (10) years have elapsed from the date the individual was discharged from probation, imprisonment, or parole, whichever is later.
 - (19) An offense relating to material or a performance that is harmful to minors or obscene under IC 35-49-3 unless ten (10) years have elapsed from the date the individual was discharged from probation, imprisonment, or parole, whichever is later.
 - (20) An offense relating to operating a motor vehicle while intoxicated under IC 9-30-5 unless five (5) years have elapsed from the date the individual was discharged from probation, imprisonment, or parole, whichever is later.
 - (21) An offense that is substantial equivalent to any of the offenses listed in this subsection in which the judgment of conviction was entered under the law of any other jurisdiction.
- Should the Contractor change personnel during the existence of the Contract providing

for services, it shall at least ten (10) days prior to using any other personnel other than those previously disclosed, provide the same information for the new personnel as provided for under the terms of the provision."

13.7 ADD the following new Paragraph:

The Owner will require the Contractor to conduct testing for drugs and alcohol for all workers on the project. Drugs and alcohol shall be as defined by Indiana Code 35-48-4-4.

"The Contractor shall provide, if awarded the right to provide services or materials under this agreement, a list of all personnel used by or on behalf of the Contractor, whether employed by them or not, who will be engaged in the providing of services or delivery of materials and goods.

With said list of persons shall be provided written evidence of drug and alcohol testing with respect to all persons on the list dated within seven (7) days of the said date of the Contract.

Contractor agrees that no person will be providing services who has tested positive to any of the items included and shall be banned from the jobsite for the duration of the project.

Continued testing shall be conducted throughout the project duration every six months maximum. Any persons testing positive shall be removed immediately from the site and shall be banned from the jobsite for the duration of the project.

The Contractors and their employees shall meet all State and Federal statutory requirements".

13.8 ADD the following new Paragraph:

The Contractor and all its subcontractors are required to comply with all provisions of Indiana Code 22-5-1.7 to affirm that it does not knowingly employ or contract with an unauthorized alien or retain an employee or contract with a person that they subsequently learn is an unauthorized alien.

The Contractor is required to enroll in and verify the work eligibility status of all newly hired employees of the contractor through the E-Verify program as defined in IC 22-5-1.7-3.

The Contractor is not required to verify the work eligibility status of all newly hired employees of the contractor through the E-Verify program if the E-Verify program no longer exists and the Contractor signs an affidavit affirming that the Contractor does not knowingly employ an unauthorized alien.

13.9 ADD the following new Paragraph:

There shall be no firearms allowed on the project site or anywhere within the project property.

Exceptions would be made for law enforcement officials, security forces required elsewhere by these Specifications, or per other requirements or allowances specifically made by the Owner.

13.10 ADD the following new Paragraph:

There shall be no smoking or tobacco use allowed within the buildings, on the project site or anywhere within the project property. Violators shall be removed from the project immediately.

Any construction materials in contact with or exposure to such tobacco products shall be removed and replaced with new, at the Contractor's expense.

Additional requirements and levels of protection are afforded to Public Buildings in compliance with Indiana Code 16-41-37, and include an enclosed structure or part of an enclosed structure that is one of the following:

- (1) Occupied by an agency of state or local government.
- (2) Used as a classroom building or a dining area at a state educational institution (as defined in IC 20-12-0.5-1).
- (3) Used as a public school (as defined in IC 20-18-2-15).
- (4) Licensed as a health facility under IC 16-21 or IC 16-28.
- (5) Used as a station for paid firefighters.
- (6) Used as a station for paid police officers.
- (7) Licensed as a child care center or child care home or registered as a child care ministry under IC 12-17.2.
- (8) Licensed as a hospital under IC 16-21 or a county hospital subject to IC 16-22.
- (9) Used as a provider's office.
- (10) School bus (as defined in IC 16-41-37-2.3).

ARTICLE 14 - TERMINATION OR SUSPENSION OF THE CONTRACT

14.1 TERMINATION BY THE CONTRACTOR

DELETE Subparagraph 14.1.1 in its entirety and replace with the following::

- 14.1.1 If the Work is stopped for a period of sixty (60) days under an order of any court or other public authority having jurisdiction, or as a result of any act of government such as a declaration of a national emergency making material unavailable, through no act or failure to act of the Contractor or a Subcontractor or their agents or employees or any other persons performing any of the Work under a contract with the Contractor, and the Owner has not otherwise suspended, delayed, disrupted or interrupted the Work in accordance with the Subparagraph, then the Contractor may, upon fourteen (14) days' written notice to the Owner, terminate the Contract, and recover from the Owner payment for all Work executed to date. Recovery by the Contractor of lost anticipated profit and overhead and other consequential and incidental damages is hereby specifically excluded.

- 14.1.3 DELETE all words following the words "payment for" and ADD the following after "payment for":

"all work executed to date. Recovery by the Contractor of last anticipated profit and overhead and other consequential and incidental damages is hereby excluded."

ADD the following new Subparagraph 14.1.5:

- 14.1.5 "The Owner shall not be liable to the Contractor for the Owner's failure to perform its obligations set forth herein if such performance is prevented or interrupted by war (including the consequences thereof), fire, tornado, hurricane, windstorms, labor problems, fuel or transportation shortages, civil unrest, governmental action, or any other natural or economic disaster or cause which is reasonably beyond the control of the Owner ("Force Majeure"). If the estimated duration of the Force Majeure is one year or more, the Contractor shall have the option to terminate this Contract upon thirty (30) days' written notice. In the event that the estimated duration of the Force Majeure is less than one year, the Contract Time shall be increased by the same length of time as the Force Majeure persisted."

14.3 SUSPENSION BY THE OWNER FOR CONVENIENCE

14.3.1 DELETE this Subparagraph in its entirety.

14.3.2 DELETE this Subparagraph in its entirety.

14.4 TERMINATION BY THE OWNER FOR CONVENIENCE

DELETE Subparagraph 14.4.3 in its entirety and substitute the following:

14.4.3 In case of such termination for the Owner's convenience, the Owner shall pay the Contractor for Work properly executed; reimbursable costs actually incurred, including costs attributed to termination of Subcontracts; and an amount representing six percent (6%) of the amount of the work not executed".

ARTICLE 16 - EQUAL OPPORTUNITY

16 ADD this new Article 16, including Paragraphs and Subparagraphs as follows:

16.1 POLICIES OF EMPLOYMENT

16.1.1 The Contractor and the Subcontractor shall not discriminate against any employee or applicant for employment because of race, religion, color, age, sex or national origin, in connection with, but not limited to employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination, rates or pay or other forms of compensation and selection for training including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth its policies of non-discrimination consistent with this Article.

END OF SECTION 00 73 01

SECTION 01 11 00 - SUMMARY OF WORK – SINGLE CONTRACT

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Section Includes:
 - 1. Work covered by the Contract Documents.
 - 2. Contractor's use of premises.
 - 3. Coordination of work and trades.
 - 4. Owner occupancy during construction.
 - 5. Partial occupancy of completed work.
 - 6. Construction scheduling and phasing.
- B. Project is being bid with construction work under one General Contract for all trades.

1.02 WORK COVERED BY CONTRACT DOCUMENTS

- A. Provide and pay for all materials, labor, services, equipment, licenses, permits, fees, taxes, and other items necessary for the execution, installation and completion of Work indicated in Contract Documents.
- B. The Work includes coordination with Architect, Owner's Representative, Owner's separate contractors, material suppliers and vendors.

1.03 CONTRACTOR'S USE OF PREMISES

- A. Contractor shall limit his use of premises for work and storage, to allow for Owner's occupancy as identified in this Section.
- B. Assume full responsibility for protection and safekeeping of products stored on premises.
 - 1. Move any stored products that interfere with operations of Owner or other Contractor.
 - 2. Obtain and pay for use of additional storage or work areas needed for operations.
 - 3. Available space for construction field offices and storage sheds is limited to the project site. Contractor must arrange for off site storage as required.
- C. Contractor shall allow for any other work outside of this contract, whether by Owner's personnel or Contractors under Owner's separate contracts, to proceed without delay or impediment.

1.04 COORDINATION

- A. Schedule, manage and expedite all work under his Contract, coordinating his work with his sub-contractors, material suppliers, vendors, and trades so that no conflicts of timing or location occur.
 - 1. Work shall progress according to approved progress schedule.
Schedule dates for incorporation of work, and identify all critical path events and dates.
 - 2. Coordinate and provide all floor, ceiling, roof, and wall sleeves.
 - 3. Provide all cutting, fitting or patching required.
- B. Keep Architect informed on the progress of the work.
 - 1. Close or cover no work until duly inspected and approved.
 - 2. Uncover un-inspected work and after approval, repair and/or replace all work at no cost to Owner.
 - 3. Notify Architect at least 7 days in advance of utility connections, utility shut-offs, mechanical equipment and oil line cutovers, street or alley closings to allow ample time to receive Owner's written approval of procedure to be followed.
 - 4. Coordinate all operations with the Architect and Owner. Complete in the minimum amount of time.

- C. Protection:
 - 1. Do not close or obstruct streets, entrance drives, sidewalks or other facilities without permission of the Owner and local authorities.
 - 2. Conduct operations with minimum interference.
 - 3. Furnish, erect and maintain barricades, warning lights, signs and guards as may be required.

1.05 OWNER OCCUPANCY

- A. Owner will occupy premises during entire period of construction for the conduct of their daily activities and operations.
- B. Cooperate with Owner or his representative in all construction operations to minimize conflict and to facilitate Owner's usage of building.
- C. Conduct construction operations to assure least inconvenience to Owner and public.
- D. Provide temporary heating and ventilation, temporary dust partitions, plastic sheeting, plywood sheeting, and any other means required to protect all elements of existing building from damage or deterioration during construction.

1.06 PARTIAL OCCUPANCY

- A. Prior to occupancy, execute Certificate of Substantial Completion for designated area.
- B. Contractor provide: Access for Owner's personnel.
- C. Owner provides, upon occupancy:
 - 1. Maintenance
 - 2. Operation of HVAC, electrical systems.
 - 3. Security.

1.07 CONSTRUCTION SCHEDULING AND PHASING

- A. Owner intends to award the Contract and issue a Notice to Proceed within **45** days after bid opening.

END OF SECTION 01 11 00

SECTION 01 14 00 - GENERAL CONSTRUCTION REQUIREMENTS

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Section Includes:
1. Special Provisions.
 2. Commencement Activity.
 3. Quality Control.
 4. Pre-final and Final/Occupancy Inspections
 5. Project Closeout.

1.02 SPECIAL PROVISIONS

- A. Project:
The Project is the total construction for which the Contractor is responsible, including all labor, materials and equipment used or incorporated in such construction.
- B. Work:
The Work comprises the completed construction designed under the Project and includes labor necessary to produce such construction, and materials and equipment to be incorporated in such construction.
- C. Contract Documents includes the following (See General Conditions 1.1.1 for definition):
1. Project Manual. (See General Conditions 1.1.7 for definition) The Project Manual is composed of the following:
 - a. The Bidding Requirements.
 - b. The Contract Forms.
 - c. The Conditions of the Contract.
 - d. The Specifications. (See General Conditions 1.1.6 for definition)
 2. Drawings (See General Conditions 1.1.5 for definition)
 3. Addenda (See Instructions to Bidders 1.3 for definition)
 4. Other Documents as identified in the Contract for Construction, the General Conditions of the Contract for Construction, and Supplementary General Conditions
- D. Demolition:
All existing Improvements indicated on the Drawings to be demolished, shall be removed by Contractor. Use such methods as required to complete the work in compliance with all governing authorities. Protect all adjacent areas of the building from damage.
- E. Permits and Fees:
The Contractor is responsible for verifying any and all fees required from all agencies and authorities having jurisdiction. The Contractor shall obtain and pay for the Building Permit and all other permits and governmental fees, licenses and inspections required, whether specifically referenced or not.
The Contractor is to include in the bid the cost of all charges payable to State, local or special community development agencies and any additional fees as required for the completion of the project.

1.03 COMMENCEMENT ACTIVITY

- A. Evidence that the Contractor has started procurement of materials, preparation and submission of shop drawings, preparation of subcontracts and other preparatory work must satisfy the requirement that work began upon receipt of Notice to Proceed.

1.04 QUALITY CONTROL

A. Testing:

1. Employ the services of an independent testing laboratory to take samples, perform tests and make inspections. The costs for such laboratory and tests shall be borne by the Contractor.
2. Submit testing reports as per Architect.
3. Refer to Section 01 45 00-Quality Control for additional requirements.

1.05 PRE-FINAL AND FINAL/OCCUPANCY INSPECTIONS

- A. The Contractor is to notify in writing, the Architect, that the work is complete for a Pre-Final Inspection (also referred to as "Final Punchlist Inspection". The Contractor must provide the Architect at least 10 calendar days advance notice.
- B. The Contractor is to diligently complete all punchlist items before a Final/Occupancy Inspection is scheduled.

1.06 PROJECT CLOSEOUT

A. Cleaning during construction:

1. The premises and the job site shall be maintained in a reasonable neat and orderly condition and kept free from accumulations of waste materials and rubbish during the entire construction period. Remove crates, cartons, and other flammable waste materials or trash from the work areas at the end of each working day.
2. Maintain the project in clean condition until the Owner accepts the building.
3. Refer to Section 01 74 23 - Cleaning for additional requirements.

B. Closeout Procedures:

Refer to Section 01 77 00 - Closeout Procedures for additional requirements.

C. Closeout Submittals:

1. Before the project can be closed out, the Contractor shall have provided all submittals required by the Contract Documents. All submittals required by the Contract Drawings or Specifications shall be sent to the Architect for review and coordination, in accordance with the requirements of the respective Drawing or Specification section. Any items that the Architect determines are incomplete or incorrect shall be corrected and resubmitted.
2. Refer to Section 01 78 00 - Closeout Submittals for additional requirements.
3. Refer to Section 01 78 46 - Closeout Maintenance Materials for additional requirements.

D. Retainage:

1. The Architect will assign a monetary value to all punchlist items not completed, and to all required submittals not received, as of the date of "Final Acceptance" and an amount equal to 200 percent of the total value of those items shall be retained and/or deducted from the Contractor's final payment until the Contractor demonstrates to the Architect's satisfaction that such items have been completed or corrected. Refer to the General Conditions and Supplementary General Conditions for additional information regarding retainage.

END OF SECTION 01 14 00

SECTION 01 21 16 - CONTINGENCY ALLOWANCE

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Section Includes:
 - 1. Contingency Allowance in Contract Sum.

1.02 CONTINGENCY ALLOWANCE

- A. Allow a lump sum fee of **\$10,000**.
- B. To be included in the Base Bid of Contract.
- C. Itemize Contingency Allowance on Application and Certificate for Payment and Schedule of Values.
- D. Contingency Allowance to be used for unforeseen conditions encountered during the work.
- E. Do not include any contractor's additional costs in bid.
Adjustments to contingency allowance will include labor, material, transportation, overhead and profit.
All costs for these items to be included in all proposals to Architect for adjustments to contract.
- F. Use Funds in Contingency Allowance only on written agreement between Owner, Architect and Contractor.
- G. All Proposals shall be authorized by the Architect prior to execution and recorded in Contractor's as-builts and Architect's project Record Documents.
- H. Adjustment to Allowances will be made by Change Order.
Any unused amounts to be credited back to the Owner.

END OF SECTION 01 21 16

SECTION 01 23 00 - ALTERNATES

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Section Includes:
 - 1. Procedures for exercising alternates.
 - 2. Identification and description of alternates.
- B. All items, either indicated on the Drawings or specified in the Project Manual, not specifically indicated to be included in a specific alternate is to be included within the base bid scope of work.

1.02 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

- A. Bidding Requirements: Quotation of cost for each alternate as listed on Proposal Form.
- B. Owner-Contractor Agreement: Alternates accepted by Owner for incorporation into the work.
- C. Sections of Specifications identified by work of each alternate.

1.03 PROCEDURES

- A. Alternates will be exercised at the option of Owner.
- B. Coordinate related work and modify surrounding work as required to complete the Work, including changes under each Alternate, when acceptance as designated in Owner-Contractor Agreement.
- C. All Alternates shall be bid.
Base Bid to be all work as shown on the Drawings and Specifications, except Alternates.
- D. Owner reserves the right to accept or reject any and all Alternates as determined solely at the discretion of the Owner. Alternates may be accepted or rejected independently from one another, and in any order of priority or hierarchy as determined by the Owner.

1.04 SCHEDULE OF ALTERNATES

A. **ALTERNATE NO. 1: PHOTOGRAPHY STUDIO**

- 1. Give the amount to be ADDED to the Base Bid for the following:
All work required in Photography Studio 109 as shown on the drawings
- 2. Base Bid to include: All work required in Airbrush/Painting 112

B. **ALTERNATE NO. 2: STAINED GLASS STUDIO**

- 1. Give the amount to be ADDED to the Base Bid for the following:
All work required in Stained Glass Studio 106 as shown on the drawings
- 2. Base Bid to include: All work required in Airbrush/Painting 112

C. **ALTERNATE NO. 3: SCULPTURE STUDIO**

- 1. Give the amount to be ADDED to the Base Bid for the following:
All work required in Sculpture Studio 105 as shown on the drawings
- 2. Base Bid to include: All work required in Airbrush/Painting 112

D. **ALTERNATE NO. 4: CERAMICS STUDIO**

1. Give the amount to be ADDED to the Base Bid for the following:
All work required in Ceramics Studio 101 as shown on the drawings
2. Base Bid to include: All work required in Airbrush/Painting 112

END OF SECTION 01 23 00

SECTION 01 31 00 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

A. Section Includes:

1. Administrative and supervisory personnel.
2. Submittals.
3. Contractor quality control.
4. Coordination Drawings.
5. Project coordination.

B. Procedures for preparation, updating and submittal of Construction Progress Documentation.

1.02 ADMINISTRATIVE AND SUPERVISORY PERSONNEL

A. Project Coordination Administrator: Contractor Representative experienced in administration, supervision, and quality control of building expansion and alteration construction, similar to Work of this Project, including mechanical and electrical work.

B. Project Field Superintendent:

1. Contractor Representative experienced in general field supervision of building construction, similar to Work of this Project, including mechanical and electrical work, to supervise, direct, inspect and coordinate Work of Contractor, subcontractors, suppliers and installers, and expedite Work to assure compliance with Construction Schedules.
2. Superintendent must read, write, and speak English fluently.
3. Superintendent must be present at the Project site whenever work is being performed. Superintendent must remain on the Project from Notice to Proceed to Substantial Completion. Do not change personnel without written permission from the Owner.

1.03 SUBMITTALS

A. Submit list of Contractor's principal staff assignments, including Project Coordination Administrator, Project Field Superintendent, Quality Control Representative, and other personnel in attendance at site; identify their duties and responsibilities.

B. Submit all items for execution of Contract as listed in Section 00 43 93 – Contractor's Bid Submittal checklist.

C. Submit shop drawings, product data, and other required submittals, in accordance with Section 01 33 00 - Submittal Procedures, for review and compliance with Contract Documents, for field dimensions and clearances, for relation to available space, and for relation to Work by Owner or separate Contracts.

D. Submit Requests for Information and interpretation of Contract Documents in a timely manner and obtain replies from Architect in accordance with the Contract.

1.04 CONTRACTOR QUALITY CONTROL

A. Perform project quality control in accordance with requirements in the Contract.

B. Coordinate scheduling of inspection and testing required by individual specification Sections and in accordance with Section 01 45 00 - Quality Control.

1.05 COORDINATION DRAWINGS

- A. Prepare and distribute coordination drawings where close coordination is required for installation of Products and materials fabricated off-site by separate entities, and where limited space availability requires maximum utilization of space for efficient installation of different components. Show interrelationship of components shown on separate shop drawings. Indicate required installation sequences.

1.06 PROJECT COORDINATION

- A. Coordinate construction activities and work of all trades under various Sections of these Specifications and Work of Contract to facilitate orderly installation of each part of Work. Coordinate construction operations included under different Sections of Specifications and Contract that are dependent upon each other for proper installation, connection, and operation.
- B. Where installation of one part of Work is dependent on installation of other components, either before or after that part of Work, schedule construction activities in sequence required to obtain uninterrupted installation.
- C. Obtain drawings, manufacturer's product data, instructions, and other data to provide a complete and proper installation.
 - 1. Check field dimensions prior to installing products.
Verify necessary clearances and means of access from equipment storage to final position.
 - 2. Make data and information available to trades involved.
- D. Ensure that utility requirements of operating equipment are compatible with building utilities. Coordinate Work of various specification Sections for installation and final connection of equipment.
 - 1. Assure that mechanical, plumbing, and electrical rough-ins have been properly located.
- E. Coordinate space requirements and installation of mechanical, plumbing, and electrical Work which are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, conduits, and wiring, as closely as possible; make runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- F. Where availability of space is limited, coordinate installation of different components to ensure maximum accessibility for required maintenance, service, and repair.
- G. Provide for installation of items scheduled for future installation.
- H. Where necessary, prepare memoranda for distribution to each party involved outlining special procedures required for coordination. Prepare memoranda for Architect and separate contractors where coordination of their work is required.
- I. In finished areas, conceal pipes, ducts, conduits, and wiring in the construction. Coordinate locations of fixtures and outlets with finish elements.
- J. Coordinate completion and clean up of Work of separate Sections in preparation for completion of work per the Contract.
- K. After Owner occupancy of Project, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize to Owner.

END OF SECTION 01 31 00

SECTION 01 31 19 - PROJECT MEETINGS

PART 1 – GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Section Includes:
 - 1. Contractor participation in pre-bid conference, pre-construction conferences, progress meetings, and pre-installation meetings.
 - 2. Architect shall schedule and chair Project Meetings and prepare summary minutes for distribution by Contractor to all in attendance.

1.02 PRE-BID CONFERENCE

- A. Architect will administer pre-bid conference to provide further understanding of Scope of Work.
- B. Attendance:
 - 1. Architect.
 - 2. All prospective bidding Contractors, Subcontractors, Suppliers and Vendors.
 - 3. Attendance is not required, but strongly encouraged.
- C. Agenda:
 - 1. Review Notice-to-Bidders.
 - 2. Review Bid Requirements and Contractor's Bid Submittal Checklist.
 - 3. Review Summary of Work.
 - 4. Review Construction Document set.
 - 5. Review Project Site (if necessary).
 - 6. Questions and Answers.
- D. Architect will notify all bidders as to time and place of Pre-Bid Conference.

1.03 PRE-CONSTRUCTION CONFERENCES

- A. Architect will administer pre-construction conference.
- B. Attendance:
 - 1. Architect.
 - 2. Owner's Representative.
 - 3. Contractor's Project Manager.
 - 4. Contractor's Job Superintendent.
- C. Agenda:
 - 1. Execution of Owner-Contractor Agreement.
 - 2. Exchange of preliminary submittals.
 - 3. Submission of executed bonds and insurance certificates.
 - 4. Distribution of Contract Documents.
 - 5. Submission of Schedule of Values. (If not required before hand).
 - 6. Designation of personnel representing the parties in Contract.
 - 7. Procedures and processing of Requests for Information, field decisions, submittals, substitutions, Applications for Payment, proposal requests, Change Orders, and contract closeout procedures.
 - 8. Scheduling.
 - 9. Construction facilities and temporary controls.
 - 10. Notice to Proceed.

- D. Architect will record minutes and distribute copies to Contractor and Owner and those affected by decisions made. Contractor is responsible for distribution of copies to Subcontractors, Suppliers and Vendors.
- E. Architect will administer mobilization conference at Project site for clarification of Contractor responsibilities in use of site and for review of administrative procedures.

1.04 PROGRESS MEETINGS

- A. Architect shall schedule and administer Project Meetings throughout progress of the Work not less frequently than every month. Additional Project Meetings shall be scheduled as appropriate to construction activity.
- B. Attendance:
 - 1. Architect.
 - 2. Owner's Representative.
 - 3. Contractor's Project Manager.
 - 4. Contractor's Job Superintendent.
 - 5. Major Subcontractors and Suppliers.
 - 6. Contractor's Quality Control Representative.
 - 7. Others as appropriate to agenda topics.
- C. Agenda:
 - 1. Review of and corrections to minutes of previous meetings.
 - 2. Review of Work progress and/or payment progress.
 - 3. Field observations, problems, and decisions.
 - 4. Identification of problems which impede planned progress.
 - 5. Review of submittals schedule and status of submittals.
 - 6. Review of off-site fabrication and delivery schedules.
 - 7. Maintenance of progress schedule.
 - 8. Corrective measures to regain projected schedules.
 - 9. Planned progress during succeeding work period.
 - 10. Coordination of projected progress.
 - 11. Maintenance of quality and work standards.
 - 12. Effect of proposed changes on progress schedule and coordination.
 - 13. Status of pending changes and substitutions.
 - 14. Other business relating to Work.
 - 15. Review of Construction Progress Documentation.
- D. Architect will record minutes and distribute copies to Owner and Contractor. Contractor shall distribute copies to all others.
- E. Contractor shall hold separate meetings with workers, sub-contractors and suppliers to coordinate means and methods of construction, and jobsite safety. Do not use Owner/Architect Progress Meetings for such purpose.

1.05 PRE-INSTALLATION MEETINGS

- A. When required in individual specification sections or as determined necessary by Architect, convene a pre-installation meeting at work site prior to commencing work of the section.
- B. Require attendance of parties directly affecting, or affected by, work of the specific section.
- C. Notify Architect seven days in advance of meeting date.

- D. Prepare agenda and preside at meeting:
 - 1. Review conditions of installation, preparation and installation procedures.
 - 2. Review coordination with related work.
 - 3. Agenda items listed in individual specification Sections.
 - 4. Installation schedule.
- E. Architect will record minutes and distribute copies to participants, and those affected by decisions made.

END OF SECTION 01 31 19

SECTION 01 32 00 - CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Section Includes:
 - 1. Construction Progress Schedule.
 - 2. Contractor as-built drawings.
 - 3. Provisions for format, content, revisions, submittals and distribution.

1.02 CONSTRUCTION PROGRESS SCHEDULE

- A. Format:
 - 1. Prepare Schedules as horizontal bar chart with separate bar for each major portion of Work or operation, identifying first work day of each week.
 - 2. Sequence of Listings: The Table of Contents of this Project Manual.
 - 3. Form: Contractor's option.
- B. Content:
 - 1. Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction.
 - 2. Identify each item by major Specification section number.
 - 3. Provide sub-schedules to define critical portions of entire Schedule.
 - 4. Show accumulated percentage of completion of each item, and total percentage of Work completed, to correspond with Application for Payment. Percentage of completion shall not include stored materials.
 - 5. Provide separate schedule of submittal dates for shop drawings, product data, and samples and dates reviewed submittals will be required from Architect. Show dates for selection of finishes.
 - 6. Show delivery dates for Owner furnished items, if any.
 - 7. Coordinate content with Section 01 29 73 - Schedule of Values.
- C. Revisions:
 - 1. Indicate progress of each activity to date of submittal, and projected completion date of each activity.
 - 2. Identify activities modified since previous submittal, major changes in scope and other identifiable changes.
 - 3. Provide narrative report to define problem areas, anticipated delays and impact on Schedule. Report corrective action taken or proposed and its effect.
- D. Submittals:
 - 1. Submit initial Schedules immediately following Award of Contract. After review, revise data and immediately submit for re-review.
 - 2. Submit up-dated Progress Schedules with each Application and Certificate for Payment.
 - 3. An updated Progress Schedule is required for review/consideration for Application and Certificate for Payment.
 - 4. Submit under transmittal letter.
- E. Distribution:
 - 1. Distribute copies of reviewed schedules to Architect job site file, subcontractors, suppliers and other concerned entities including separate contractors.
 - 2. Instruct recipients to promptly report, in writing, problems anticipated by projections shown in Schedules.

1.03 CONTRACTOR AS-BUILT DRAWINGS

A. Format:

1. Contractor's job superintendent to record as-built conditions onto a single set of project drawings for all trades included in scope of work.
2. As-built set to be kept on site at all times.
3. Documentation may be hand written in ink or pasted directly onto drawings.
All information must be considered to be permanently affixed.

B. Content:

1. Include work of all trades included in scope of work.
2. Include all changes, errors, deviations, omissions, additions, clarifications and corrections.
3. Include any item installed in a location other than that shown on contract drawings.
4. Correct any inaccurate or altered dimension.

C. Revisions:

1. As-built drawings shall be updated daily with all work completed.
2. Contractor job superintendent to be responsible for subcontractor information on as-built drawings.

D. Submittals:

1. As-built drawings may be reviewed at progress meetings or periodically as requested by Architect to review entries to date.

E. Distribution:

1. As built drawings shall be given to Architect prior to release of final payment.
2. Refer to Section 01 78 00 - Closeout Submittals.

END OF SECTION 01 32 00

SECTION 01 33 00 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Section Includes:
1. Submittal Schedule.
 2. Submittal Requirements.
 3. Shop Drawings.
 4. Electronic files provided by the Architect.
 5. Product Data.
 6. Samples.
 7. Manufacturer's Information.
 8. Review by Contractor and Architect.
 9. Re-submittals.
 10. Distribution.

1.02 SUBMITTAL SCHEDULE

- A. Submit to the Architect a schedule listing all submittals required for review as required in the individual specifications sections.
- B. List submittals by specification section as listed in the index.

1.03 SUBMITTAL REQUIREMENTS

- A. Formats:
1. Submit all drawings and technical data electronically in PDF format.
 - a. Furnish all submittals specified in all sections of the specifications.
 - b. Submit each section under a separate transmittal for clarity and ease of review.
 - c. Make a complete submittal for each section; do not issue multiple submittals per section.
 - d. Compile all sheets, drawings, and product data into a single electronic file for review.
Do not submit multiple PDF files per sheet or item.
 - e. Identify manufacturer and subcontractor/supplier.
 - f. Submit Material and Safety Data Sheets for all products and materials.
 - g. Name each PDF file to match specifications title and number, matching that as listed in the project manual.
 2. Submit to Architect via Architect's project management website specific to this project.
 3. Submit actual samples for finishes, colors, and textures for approval via mail or hand delivery.
- B. Transmit submittals in accordance with approved Progress Schedule and in such sequence to avoid delay in the Work or work of other contracts.
- C. Apply Contractor's stamp, signed or initialed, certifying to review, verification of products, field dimensions and field construction criteria and coordination of information with requirements of Work and Contract Documents.
- D. Coordinate submittals into logical groupings to facilitate interrelation of the several items:
1. Finishes which involve Architect selections of colors, textures, or patterns.
 2. Associated items which require correlation for efficient function or for installation.

1.04 SHOP DRAWINGS

- A. Present in a clear thorough manner, drawn by professional draftsman.
- B. Identify project with title as shown on cover of Project Manual; identify each element of drawings by reference to sheet number and detail, schedule, or room number on Contract Documents.
- C. Identify field dimensions; show relation to adjacent or critical features of Work or products.
- D. Sheet Size:
 - 1. Minimum: 8-1/2 x 11 inches.
 - 2. Maximum: 30 x 42 inches.

1.05 ELECTRONIC FILES PROVIDED BY THE ARCHITECT

- A. Architect may make available, at no cost, base xref drawings in AutoCAD format for contractor's use in preparing shop drawings.
- B. AutoCAD version of electronic files will be the latest version being utilized in the Architect's office. The Architect has no obligation to provide electronic files in a format that may be an old, outdated, reduced or simplified version of that being utilized in the Architect's office.
- C. Electronic files are an instrument of the Architect's service, and are the property of the Architect.
- D. The use of the information contained in the electronic files is at the sole risk of the user.
- E. The use of the electronic files does not relinquish the contractor from responsibilities for site and field verification of spaces, construction, conditions, requirements, dimensions, etc.

1.06 PRODUCT DATA

- A. Submit only pages which are pertinent; mark each copy of standard printed data to identify pertinent products, referenced to Specification Section and Article number. Show reference standards, performance characteristics, and capacities; wiring and piping diagrams and controls; component parts; finishes; dimensions; and required clearances.
- B. Modify manufacturer's standard schematic drawings and diagrams to supplement standard information and to provide information specifically applicable to the Work. Delete information not applicable.
- C. Provide manufacturer's published catalog pages and industry cutsheets, with all items and options marked as appropriate to the project.

1.07 SAMPLES

- A. When finishes are specified on the Drawings, submit samples of the specified finish for approval.
- B. When finishes are not specified on the Drawings, submit full range of manufacturer's standard finishes, except when more restrictive requirements or price groups are specified, indicating colors, textures, and patterns, for Architect's selection.
- C. Submit samples to illustrate functional characteristics of products, including parts and attachments.
- D. Label each sample with identification required for transmittal letter.
- E. Submit number of samples specified in individual specifications sections but not less than three (3).

- F. Special circumstances may require additional samples for determination of acceptance, such as textures, patterns, colorways, etc. Provide sample in the quantity and/or size as required for this determination.
Requirements to be determined solely by the Architect.
All such samples will be returned to the Contractor, less those retained for Owner and Architect files.
- G. Samples for selection of finishes need to be submitted as actual samples of the actual colors, materials and textures for proper selection and review of available choices. Samples for finishes already selected as indicated in the Drawings may be color charts in lieu of actual samples, if acceptable to the Architect.
- H. All samples may be retained for Owner and Architect files.
- I. See individual Specification sections for additional information and requirements.

1.08 MANUFACTURER'S INFORMATION

- A. Manufacturer's instructions for storage, protection, preparation, assembly, installation, adjusting, balancing and finishing.
- B. Installation details, anchoring requirements or other information specifically required by manufacturer.
- C. Specific information or details required by Manufacturer to uphold warranty of product specified.

1.09 CONTRACTOR'S REVIEW

- A. Review submittals prior to transmittal; verify subcontractor's field measurements, field construction criteria, manufacturer's catalog numbers, and conformance of submittal with requirements of Contract Documents.
- B. Coordinate submittals with requirements of Work and of Contract Documents.
- C. Affix a stamp and sign each drawing, manufacturer's data, sample, etc. as follows:

This submittal has been reviewed by (*Name of Contractor*) and approved with respect to the means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incidental thereto. (*Name of Contractor*) also warrants that this submittal complies with contract documents and comprises no variations or increase in contract price thereto.

By:-_____

Date:_____

- D. Notify Architect in writing at time of submittal, of any deviations from requirements of Contract Documents. Architect will neither accept incomplete submittals, nor those which in the Architect's opinion, have not been properly reviewed by the Contractor.
- E. Do not fabricate products or begin work which requires submittals until return of submittal with Architect acceptance.

- F. Submittals which have not been thoroughly reviewed by Contractor prior to being forwarded to Architect will be rejected and returned for review.

1.10 ARCHITECT'S REVIEW

- A. Architect will review shop drawings, product data, and samples and return submittals within a reasonable time frame for complete review and approval.
- B. Architect's review is for conformance with information given and design concept expressed in the Contract Documents. The review shall not constitute approval of safety precautions, or 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.
- C. Review of shop drawings does not authorize changes to the contract sum unless stated in a separate letter or change order.

1.11 RE-SUBMITTALS

- A. Make re-submittals under procedures specified for initial submittals; identify changes made since previous submittals.

1.12 DISTRIBUTION

- A. Duplicate and distribute reproductions of shop drawings, copies of product data, and samples, which bear Architect's stamp of approval, to job site file, Contractor's Record Documents file, sub-contractors, suppliers and other entities requiring information.

END OF SECTION 01 33 00

SECTION 01 42 00 - REFERENCES

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Section Includes:
 - 1. Specification format and content.
 - 2. Quality assurance.
 - 3. Reference standards.
 - 4. Abbreviations.

1.02 SPECIFICATION FORMAT AND CONTENT

- A. Specification Format:

Specifications are organized into Divisions and Sections based on Construction Specifications Institute (CSI) Division format and Master Format numbering system.

Specific projects may also include an added Division 17-Technology and Communications.
- B. Specification Content:

This Specification uses certain conventions in use of language and intended meaning of certain terms, words, and phrases when used in particular situations or circumstances. These conventions are explained as follows:

 - 1. Abbreviated Language:

Language used in Specifications and other Contract Documents is abbreviated type. Words and meanings shall be interpreted as appropriate. Words that are implied, but not stated shall be interpolated as the sense required. Singular words will be interpreted as plural and plural words interpreted as singular where applicable and context of Contract Documents so indicates.
 - 2. Imperative and streamlined language is used generally in Specifications. Requirements expressed in imperative mood are to be performed by Contractor. At certain locations in text, for clarity, subjective language is used to describe responsibilities that must be fulfilled indirectly by Contractor, or by others when so noted.
 - 3. The words "shall be" shall be included by inference wherever a colon (:) is used within a sentence or phrase.

1.03 QUALITY ASSURANCE

- A. For Products or workmanship specified by association, trade, or other consensus standards, comply with requirements of standard, except when more rigid requirements are specified or are required by applicable codes. Such standards are made a part of Contract Documents by reference.
- B. Conform to reference standard by date of issue current on original date of issue indicated on Contract Documents.
- C. Obtain copies of standards when required by Contract Documents.
- D. Maintain copy at Project Site during submittals, planning, and progress of specific Work, until Substantial Completion.
- E. Should specified reference standards conflict with Contract Documents, request clarification from the Architect before proceeding.
- F. The contractual relationship, duties, and responsibilities of the parties in Contract nor those of Architect shall not be altered from Contract Documents by mention or inference otherwise in any reference document.

1.04 REFERENCE STANDARDS

A. 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 Architect for decision before proceeding.

1. Minimum Quantity or Quality Levels:

Quantity or quality level shown or specified shall be the minimum provided or performed. Actual installation may comply exactly with minimum quantity or quality specified, or it may exceed minimum within reasonable limits. In complying with these requirements, indicated numeric values are minimum or maximum, as appropriate for context of requirements.

Refer uncertainties to Architect for decision before proceeding.

B. Copies of Standards:

Each entity engaged in construction on Project is required to be familiar with industry standards applicable to that entity's construction activity. Copies of applicable standards are not bound with Contract Documents.

1. Where copies of standards are needed for performance of a required construction activity, Contractor shall obtain copies directly from publication source.

1.05 ABBREVIATIONS

A. Abbreviations and Names:

Trade association names and titles of general standards are frequently abbreviated. Where such acronyms or abbreviations are used in Specifications or other Contract Documents, they mean the recognized name of trade association, standards generating organization, authority having jurisdiction, or other entity applicable to context of text provision. Refer to "Encyclopedia of Associations," published by Gale Research Company, available in most libraries.

END OF SECTION 01 42 00

SECTION 01 45 00 - QUALITY CONTROL

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Section Includes:
 - 1. General Requirements.
 - 2. Quality Control Procedures.
 - 3. Testing Services.
 - 4. Contractor Field Inspection and Testing.
 - 5. Contractor's Test and Inspection Reports.
 - 6. Non-Compliance Check-Off List.
 - 7. Completion and Inspection of Work.

1.02 GENERAL REQUIREMENTS

- A. Testing is required for:
 - 1. Plumbing testing
 - 2. Electrical testing

1.03 QUALITY CONTROL PROCEDURES

- A. Monitor quality control over Contractor staff, subcontractors, suppliers, manufacturer's, products, services, site conditions, and workmanship.
- B. Comply fully with manufacturer's published instructions, including each step in sequence of installation.
- C. Should manufacturer's published instructions conflict with Contract Documents, request clarification from Architect before proceeding.
- D. Comply with specified standards as a minimum quality for Work, except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform Work by persons who are thoroughly qualified and trained in their respective trade, to produce workmanship of specified quality.
- F. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.
- G. Perform tests required by governing authorities having jurisdiction and utilities having jurisdiction.

1.04 CONTRACTOR FIELD INSPECTION AND TESTING

- A. Contractor:
 - Test and Inspect Work provided under this Contract to ensure Work is in compliance with Contract requirements. Required tests and inspections are indicated in each individual Specification Section.
- B. Preparatory Inspection:
 - Performed prior to beginning Work and prior to beginning each segment of Work and includes:
 - 1. Review of Contract requirements.
 - 2. Review of shop drawings and other submittal data after return and approval.
 - 3. Examination to assure materials and equipment conform to Contract requirements.
 - 4. Examination to assure required preliminary or preparatory Work is complete.

- C. Initial Inspection:
Performed when representative portion of each segment of Work is completed and includes:
 - 1. Performance of required tests.
 - 2. Quality of workmanship.
 - 3. Review for omissions or dimensional errors.
 - 4. Examination of products used, connections and supports.
 - 5. Approval or rejection of inspected segment of Work.
- D. Follow-Up Inspections:
Performed daily, and more frequently as necessary, to assure non-complying Work has been corrected.
- E. Testing and Inspection:
Perform testing and inspection in accordance with requirements in individual Sections.

1.05 CONTRACTOR'S TEST AND INSPECTION REPORTS

- A. Prepare and submit, to Architect, a written report of each test or inspection signed by Contractor Quality Control Representative performing inspection within two (2) days following day inspection was made.
- B. Include the following on written reports of inspection:
 - 1. Cover sheet prominently identifying that inspection "CONFORMS" or "DOES NOT CONFORM" to Contract Documents.
 - 2. Date of inspection and date of report.
 - 3. Project name, location, solicitation number, and Contractor.
 - 4. Names and titles of individuals making inspection, if not Contractor's Project Field Superintendent.
 - 5. Description of Contract requirements for inspection by referencing Specification Section.
 - 6. Description of inspection made, interpretation of inspection results, and notification of significant conditions at time of inspection.
 - 7. Requirements for follow-up inspections.

1.06 NON-COMPLIANCE CHECK-OFF LIST

- A. Maintain check-off list of Work that does not comply with Contract Documents, stating specifically what non-complying, date faulty Work was originally discovered, and date Work was corrected. No requirement to report deficiencies corrected same day it was discovered. Submit copy of Non-Compliance Check-Off List of non-complying work items to Architect on a weekly basis.

1.07 COMPLETION AND INSPECTION OF WORK

- A. Prior to final acceptance by Architect, submit a certification signed by Contractor to Architect stating that all Work has been inspected and all Work, except as specifically noted, is complete and in compliance with Contract Documents.
- B. Record Documents:
 - 1. By Contractor Quality Control Representative. Ensure that "As-Builts" required are marked to show any deviations which have been made during the course of construction and are kept current on a daily basis. Upon completion of the Work, certify the accuracy of the "As-Builts" and submit to Architect.
 - 2. Refer to Section 01 32 00 - Construction Progress Documentation.
 - 3. Refer to Section 01 78 00 - Closeout Submittals.

END OF SECTION 01 45 00

SECTION 01 51 00 - TEMPORARY UTILITIES

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Section Includes:
1. Responsibility of Owner and Contractor.
 2. Provisions for temporary electrical power.
 3. Provisions for temporary lighting.
 4. Regulatory Agency Requirements.

1.02 RESPONSIBILITY

- A. Responsibility of Owner:
1. Owner is not responsible for the establishment or payment of any temporary utilities.
 2. Pay all utility bills from the utility companies for Owner's existing established utility services within existing buildings and construction limits for the duration of construction.
 3. Owner is not responsible for any costs directly to the contractor for non-established utility items including such items as fuels, tanks, generators, extensions, hookups, feeds, cords, hoses, wiring, etc. as may be required by the contractor for their ability to provide needed temporary utilities specified herein.
 4. Owner is not responsible for any Contractor job overhead costs such as cell phones, fax, internet, water hauling, etc. that may be required as part of the construction activities.
- B. Responsibility of Contractor:
1. Pay all utility bills for all new or temporary utility services within construction limits for duration of construction.
 2. Coordinate establishment, timing and all requirements of all temporary utilities with all utility companies and authorities having jurisdiction.
 3. Coordinate establishment, timing and all requirements of all permanent utilities, including new services and/or reworking of existing services, with all utility companies and authorities having jurisdiction.
 4. Provide, install, re-install, remove, coordinate, etc, any and all temporary utilities to all areas of the site and project resulting from any and all phasing of the work.
 5. Provide temporary electrical power, as required.
 6. Provide temporary lighting, as required.
 7. Coordinate shut-offs of any and all utilities with Owner at least 24 hours in advance.

1.03 DESCRIPTION

- A. Temporary Electrical Power:
1. Provide adequate electrical power centers, wiring and services for all tools, equipment and miscellaneous items.
 2. Locate so that power is available at any point with no more than 100 foot extension.
 3. Provide equipment grounding continuity for entire system.
 4. Individual contractors and users provide grounded UL approved extension cords from power center.
 8. Contractor to provide power for any and all temporary field offices, architect's field office, storage and construction buildings.
 9. Provide temporary covers or plates for any and all openings, electrical boxes, receptacles, etc. that may be open during construction or awaiting installation of final covers or plates.
- B. Temporary Lighting:
1. Provide work lighting, safety lighting and security lighting.
 2. Provide lighting for construction and storage areas.

3. Lightings Levels:
 - a. General work lighting and safety lighting 5 foot candles.
 - b. Finishing and detail work 20 foot candles.
4. Periods of Service:
 - a. Work and safety lighting continuous during working hours.
 - b. Security lighting at all hours of darkness.
5. Replace lamps throughout, as required.

1.04 REGULATORY AGENCY REQUIREMENTS

- A. Obtain and pay for permits as required by authorities.
- B. Obtain and pay for temporary easements as required across property other than Owners.
- C. Comply with applicable Federal, State, and Local Codes:
 1. Occupational Safety and Health Act of 1970, as amended.
 2. National Electric Code.
 3. National Electric Safety Code.
- D. Comply with Utility Regulations.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Materials may be new or used, adequate in capacity for the purpose intended, without creating unsafe conditions or violating codes.
- B. Comply with Electrical Basic Materials and Methods, Division 26:
 1. Temporary wiring shall include green equipment grounding conductor and all outlets shall be grounding type.
 2. Provide required facilities, including transformers, conductors, poles, conduits, raceways, breakers, fuses and switches.
 3. Provide vapor proof and explosion proof fixtures in applicable areas.
- C. Comply with Basic Mechanical Requirements, Division 23:
 1. Provide required facilities, including piping, valves, pumps, pressure regulators and tanks.
 2. Portable Heaters: Oil or gas fired with electric blower, not requiring vent from heated space.
 3. Salamanders shall not be used.

PART 3 - EXECUTION

3.01 GENERAL

- A. Comply with applicable sections of Division 23, Mechanical and Division 26, Electrical.
- B. Install work in neat and orderly manner, structurally sound.
- C. Locate services to avoid interference with traffic, work and storage areas, material handling equipment.
- D. Modify service as work progress requires.

3.02 REMOVAL

- A. Remove completely all temporary materials and equipment upon completion of construction or when no longer required.
- B. Clean and repair damage caused by temporary installation and restore to satisfactory condition per Owner and Architect.
- C. Immediately prior to completion of project, remove temporary lamps and install new lamps throughout.

END OF SECTION 01 51 00

SECTION 01 53 00 - TEMPORARY CONSTRUCTION

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Section Includes:
 - 1. Temporary Structures:
 - a. Storage Trailers.
 - b. Ladders, Ramps, etc.
 - 2. Installation.
 - 3. Removal and Cleanup.
 - 4. Protection.
 - 5. Temporary Use of Elevator.

PART 2 - PRODUCTS

2.01 TEMPORARY STRUCTURES

- A. Storage Trailers:
 - 1. Provided by each General or Prime Contractor or subcontractor as required.
 - 2. Coordinate location with Architect.
 - 3. Remove at project completion and clean up area.
- B. Stairs, Ladders, Ramps, etc.:
 - 1. Provided by each individual General or Prime Contractor.
 - 2. Provide temporary stairs, ladders, ramps runways, scaffolds, derricks, chutes and similar items required for proper execution of work by the trades.

PART 3 – EXECUTION

3.01 INSTALLATION

- A. Temporary Structures:
 - 1. Locate as directed to avoid interference with work.
 - 2. Relocate as required and as directed by Architect.
 - 3. Construct with code-approved service connections.
 - 4. Mount fire extinguishers in prominent accessible location.
- B. Temporary Construction Apparatus:
 - 1. Erect Scaffolding, securely in conformance with labor laws and safety codes.
 - 2. Construct stairs, ladders, ramps, runways and derricks security to sustain 100 psf minimum live load or as required for their use.

3.02 REMOVAL AND CLEAN UP

- A. Remove all temporary structures and materials completely upon completion of construction.
- B. Remove debris and clean area.
- C. Repair all damage and restore to finish condition.

3.03 PROTECTION

- A. Safety:
 - 1. Maintain lights and barricades on all obstruction and hazards during contract period in conformance to federal and local laws and codes.

- B. Fire Protection:
 - 1. Provide multi-purpose dry chemical extinguishers.
 - 2. Locate one extinguisher adjacent to each stairway.
 - 3. Wherever and whenever any burning, welding, cutting or soldering operations are in progress, or equipment is in use, or any work involving a fire hazard is performed, the Contractor or Subcontractor responsible for such operation shall have at all times acceptable fire extinguishes or protection within ten feet of the operation.
- C. Equipment:
 - 1. Each contractor and subcontractor shall take necessary precautions to protect and secure own equipment, tools and material.

3.04 TEMPORARY USE OF ELEVATOR

- A. Elevator may NOT be used by Contractor for temporary service during construction.

END OF SECTION 01 53 00

SECTION 01 62 00 - PRODUCT OPTIONS AND SUBSTITUTIONS

PART 1- GENERAL

1.01 REQUIREMENTS INCLUDED

Section Includes:

1. Contractor's options.
2. Requests for substitutions.

1.02 CONTRACTOR'S OPTIONS

- A. For products specified only by referenced standards, select product meeting standards and submit for approval in accordance with this section.
- B. For products listing several manufacturers or model numbers, the following criteria apply:
 1. For specification sections naming a list of acceptable manufacturers and only one manufacturer's specific model name or number, alternate products from the list of acceptable manufacturers are acceptable only if they are equivalent to the named, specific, model name or number in all respects. If the alternate manufacturer's product is not equivalent to the named, specific, model name or number in all respects, then that manufacturer's product is not an acceptable substitution, even though they are named as an acceptable manufacturer in the specification section. Proposed products from listed alternate manufacturers with no model name or model number listed must be submitted in accordance with this section.
 2. For specification sections naming a list of acceptable manufacturers, and no specific model number from any of the listed manufacturers is named in the specification, alternate products from named manufacturers are acceptable provided that they are equivalent to the listed performance criteria and referenced standards in all respects. If the alternate manufacturer's product is not equivalent to the listed performance criteria and referenced standards in all respects, then that manufacturer's product is not an acceptable substitution, even though they are named as an acceptable manufacturer in the specification section.
 3. For specification sections naming a list of acceptable manufacturers and a number of manufacturer's specific model numbers, any of the named, specific, referenced products as listed are acceptable. Alternate products from the listed acceptable manufacturers are acceptable only if they are equivalent to at least one of the named, specific, model names or numbers in all respects. If the alternate manufacturer's product is not equivalent to at least one of the named, specific, model names or numbers in all respects, then that manufacturer's product is not an acceptable substitution, even though they are named as an acceptable manufacturer in the specification section. Proposed products from listed alternate manufacturers without a listed model name or number must be submitted in accordance with this section.
- C. For products specified by naming only one product and manufacturer, there is no option, and no substitution will be allowed. This item may have been specified in this manner to standardize the Owner's maintenance procedures or stock inventory, comply with the Owner's warranty requirements, or to maintain compatibility with existing construction. In some instances, this item may have been specified to determine a level of quality or performance desired and requests for substitutions may be accepted for consideration as determined by the Architect.

1.03 REQUESTS FOR SUBSTITUTIONS

- A. During period of bid preparation, Architect will consider written requests for substitutions, received at least ten (10) calendar days prior to bid date; requests received after that time will not be considered.
- B. Products proposed for installation by the Contractor and approved by the Architect shall not be changed except with written consent of the Architect.
- C. Submit all information to the Architect electronically via e-mail or CD, unless otherwise permitted. If hard copies are permitted, submit two (2) copies of all information.
- D. Include the following information in request.
Submittals or product catalogs without the following specific information listed will not be considered.
 - 1. Complete data substantiating compliance of proposed substitution with Contract Documents.
 - 2. Product Data:
 - a. Product identification, including manufacturer's name and address.
 - b. Manufacturer's literature;
 - 1) Product description.
 - 2) Performance and test data.
 - 3) Reference standards.
 - 4) Material safety and data sheets.
 - c. Samples.
 - d. Name and address of similar projects which may be visited in vicinity of project on which product was used and date of installation.
 - 3. Construction Method: detailed description and drawings of proposed method.
 - 4. Itemized comparison of proposed substitution with product or method specified.
 - 5. Data relating to changes in construction schedule.
 - 6. Relation to separate contracts.
 - 7. Accurate cost data on proposed substitution in comparison with product or method specified.
 - 8. Literature of item proposing to replace, proving equality and comparison.
- E. In making the request for substitution, Bidder/Contractor represents:
 - 1. They have investigated proposed product or method and determined that it is equal or superior in all respects to that specified.
 - 2. They will provide the same warranty requirements for substitution item as for product or method specified.
 - 3. They will coordinate and accommodate installation of accepted substitution into the work, making such changes as may be required for work to be complete in all respects and trades.
 - 4. The Bidder/Contractor waives all claims for any and all additional costs or time related to this substitution which consequently become apparent, by contractor, subcontractors, vendors, and suppliers. Bidder/Contractor shall be responsible for any and all costs, direct or indirect, resulting from this Request.
 - 5. Cost data is complete and includes all related costs under his Contract, but excludes:
 - a. Costs under separate contracts.
 - b. Architect's redesign costs, if any.
- F. Substitutions will not be considered if (in the opinion of the Architect):
 - 1. Request is not received within the proper timeframe for consideration prior to the bid date.
 - 2. Request does not contain the proper information for determination of substitution.
 - 3. Item has been specified with no substitutions permitted.
 - 4. Item is not considered to be equal to that specified.
 - 5. Item would require substantial revision to the Contract Documents or design intent.
 - 6. Item would have an adverse effect on the project or construction schedule.

7. Item would have an adverse effect on other trades or scope of work.
 8. Item is deemed unacceptable by the Owner for any reason.
 9. Item is deemed not equal to the desired aesthetic or have an adverse aesthetic effect; including colors, textures, patterns or appearance specified or intended.
 10. They are indicated or implied on shop drawings or project data submittal without formal request submitted in accordance with this Section.
 11. They have not been included in an addendum during bidding.
 12. They are made after award of Contract.
- G. It is the responsibility of the bidder to make a complete and proper submission for their request for substitution, to the correct party as indicated in the specifications and within the required timeframe. The Architect is not responsible for any errors in the bidders submission, including such items as sending information to the incorrect contact person, or sending the request to the incorrect mailing address, fax number or e-mail address.
- H. The decision of the Architect is FINAL.

END OF SECTION 01 62 00

SECTION 01 65 00 - PRODUCT DELIVERY AND HANDLING

PART 1- GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Section Includes:
 - 1. Material shipments and project delivery to job site.
 - 2. Handling of materials and products included in project.
 - 3. Phasing of the work.

1.02 DELIVERY

- A. Delivery materials, supplies or equipment to Project site during working hours.
- B. Deliveries made during other than normal working hours must be received by an authorized agent of the Contractor.
- C. No employee of the Owner is authorized to receive any shipment designated for this project.
- D. The Owner assumes no responsibility for receiving any shipments designated for this project.
- E. Under no circumstances may shipments be directed to, or in care of, the Owner.

1.03 HANDLING

- A. All materials furnished under this Contract shall be identified, shipped, addressed, consigned, etc., to the Contractor who may be charged therewith by giving the name of the Contractor, the name of the project, the street and the city.

1.04 PHASING OF THE WORK

- A. Work may be phased, limiting installation of materials to separate areas of site or times of construction.
- B. Any and all coordination of materials on site related to phasing of the work shall be accomplished by the Contractor at no additional costs to the Owner.
- C. All materials, equipment, and associated items and components for the scope of work are to be delivered to the site only as and when needed for installation. Time allowed on site prior to installation shall be a reasonable timeframe as deemed acceptable by the Architect.
- D. All items on site shall be stored off the ground and protected by watertight encapsulating cover in preparation for immediate installation.
- E. Any and all items on site in a timeframe deemed unacceptable by the Architect for any reason, or deemed to be damaged by improper handling or storage, are to be removed from the site and returned to the manufacturer, without cost to the Owner. Products shall be replaced entirely with new materials at the time needed and deemed acceptable for installation.

END OF SECTION 01 65 00

SECTION 01 73 29 - CUTTING AND PATCHING

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

A. Section Includes:

1. Make several parts fit properly.
2. Uncover work to provide for installation of ill-timed work.
3. Remove and replace defective work.
4. Remove and replace work not conforming with requirements of Contract Documents.
5. Remove samples of installed work as specified for testing.
6. Remove existing construction necessary to install new materials, equipment, mechanical or electrical items.

PART 2 - PRODUCTS

2.01 MATERIALS

For replacement of work removed: Comply with Specifications.

PART 3 - EXECUTION

3.01 PREPARATION

A. General:

1. Do not endanger any other work by cutting or altering work or any part of it.
2. Do not cut or alter work of another contractor without the written consent of Architect.
3. Patching and refinishing shall be executed by the trade experienced in such finishing work.

B. Prior to cutting:

1. Provide shoring, bracing and support as required to maintain structural integrity of project.
2. Provide protection for other portions of project.
3. Provide protection from elements.
4. Advise Architect designating time work will be uncovered to provide for observation.

3.02 PERFORMANCE

- A. Execute cutting and demolition by methods which will prevent damage to other work and will provide proper surfaces to receive installation of repairs and new work.
- B. Execute excavating and backfilling by methods which will prevent damage to other work and will prevent settlement.
- C. Execute fitting and adjustment of products to provide a finished installation to comply with specified tolerances, finishes.
- D. Cut existing concrete openings for piping, floor drains, etc., by core drilling.
- E. Cut existing walls, floors, ceilings, roofs, etc. necessary for the proper installation of new materials, equipment, mechanical or electrical items. Provide all necessary framing, lintels, hangers, etc. to maintain the structural integrity of the building system after cutting.
- F. Employ original installer to perform cutting and patching for exposed finished surfaces.

- G. Restore work which has been cut or removed; install new products to provide completed work in accord with requirements of Contract Documents.
- H. Contractor is responsible for cost to restore or patch adjacent surfaces to original condition.
- I. Fit work airtight to pipes, sleeves, ducts, conduits and other penetrations.
- J. Refinish entire surface as necessary to provide an even finish.
 - 1. Continuous surfaces: To nearest intersections.
 - 2. Assembly: Entire refinishing.

END OF SECTION 01 73 29

SECTION 01 74 23 - CLEANING

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Section Includes:
 - 1. Description of general cleaning requirements.
 - 2. Regulatory agency requirements.
 - 3. Cleaning during construction.
 - 4. Final Cleaning.

1.02 DESCRIPTION

- A. The General Contractor is responsible for all cleaning unless specifically noted otherwise.
- B. Maintain premises and public properties free from accumulations of waste, debris, and rubbish, caused by operations.
- C. Remove temporary wiring: by respective contractors.
- D. At completion of work, remove waste materials, rubbish, tools, equipment, machinery and surplus materials, and clean all sight-exposed surface; leave project clean and ready for occupancy.

1.03 REGULATORY AGENCY REQUIREMENTS

- A. Maintain project in accord with Occupational Safety & Health Act of 1970 as amended, in terms of clean up.
- B. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
 - 1. Do not burn or bury rubbish and waste materials on project site.
 - 2. Do not dispose of volatile wastes such as mineral spirits, oil or paint thinner in storm or sanitary drains, or bury below ground.

PART 2 - PRODUCTS

2.01 MATERIAL

- A. Use only cleaning materials recommended by manufacturer of surface to be cleaned.
- B. Use cleaning materials only on surfaces recommended by cleaning material manufacture.

PART 3 - EXECUTION

3.01 CLEANING DURING CONSTRUCTION

- A. Execute cleaning to insure that building, grounds and public properties are maintained free from accumulations of waste material and rubbish on a daily basis by all trades.
- B. Wet down dry materials and rubbish to lay dust and prevent blowing dust.
- C. At reasonable intervals during progress of Work, clean site and public properties, and dispose of waste materials, debris and rubbish.
- D. Provide on-site containers for collection of waste materials, debris and rubbish.

- E. Remove waste materials, debris and rubbish from site and legally dispose of at public or private dumping areas off Owner's property.
- F. Handle materials in a controlled manner with as few handlings as possible; do not drop or throw materials from heights.
- G. Schedule cleaning operations so that dust and other contaminants resulting from cleaning process will not fall on wet, newly painted surfaces.
- H. Ensure that no construction materials or items are accessible to public on site or grounds.

3.02 FINAL CLEANING

- A. Employ experienced workman or professional cleaners for final cleaning.
- B. In preparation for substantial completion or occupancy, conduct final inspection of sight-exposed interior and exterior surfaces, and of concealed spaces.
- C. Remove grease, dust, dirt, stains, labels, fingerprints and other foreign materials from sight-exposed interior and exterior finished surfaces; polish surfaces so designated to shine finish.
- D. Wash and clean all glass, removing labels.
- E. Clean and polish fixtures, equipment and materials.
- F. Repair, patch and touch-up marred surfaces to specified finish, to match adjacent surfaces.
- G. Vacuum all carpeted areas; wax and polish all tile and resilient flooring areas.
- H. Remove all foreign materials from site area.
- I. Broom clean paved surfaces; rake clean other surfaces of grounds.
- J. Each Prime Contractor shall be responsible for cleaning all equipment installed by the respective contractors.
- K. Electrical Work:
 - 1. Cleaning of their equipment.
 - 2. Replace all bulbs in fixtures used for temporary lighting during construction.
- L. Conduct final cleaning and preparation of surfaces and materials as per manufacturer's recommendation and in strict accordance with manufacturer's guidelines.
- M. Owner will assume responsibility for cleaning as time designated on Certificate of Substantial Completion, Conditional Acceptance or partial occupancy, whichever is first, for Owner's acceptance of Project or portion thereof.

END OF SECTION 01 74 23

SECTION 01 77 00 - CLOSEOUT PROCEDURES

PART 1- GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Section Includes:
 - 1. Administrative procedures in closing out the work.
 - 2. Procedures for Substantial Completion.
 - 3. Procedures for Final Inspection.
 - 4. Required contractor guarantees.
 - 5. Evidence of payments and release of liens.
 - 6. Final adjustment of accounts.
 - 7. Final Application and Certificate for Payment.
 - 8. Post construction inspection.
 - 9. Closeout submittals required are specified in Section 01 78 00.
 - 10. Closeout maintenance materials required are specified in Section 01 78 46.

1.02 SUBSTANTIAL COMPLETION

- A. Submit written certification to Architect that project or designated portion of project is substantially complete and ready for use by Owner.
- B. Architect will make an inspection within a reasonable time after receipt of such notice. The Contractor is responsible for the final punchlist inspection in accordance with the General Conditions. No inspection by the Architect will be made until the Contractor submits written certification that the punchlist has been issued and complete. The Architect's Substantial Completion inspection is not for the purpose of preparing a "to-do" list for the Contractor to use in finishing the work. If it becomes apparent at the time of the Substantial Completion inspection that items affecting life safety, accessibility, security, or full intended use of space are not complete, the inspection will be terminated and the Contractor will be liable for the costs of re-inspection.
- C. Should Architect consider that work is not substantially complete:
 - 1. Architect shall immediately notify Contractor, in writing, stating reasons.
 - 2. Contractor to remedy deficiencies and send second written notice of substantial completion to Architect.
 - 3. Architect will re-inspect Work.
 - 4. Contractor to pay costs of Architect's re-inspection.
- D. When Architect/Engineer considers that work is substantially complete; Architect will prepare and issue a Certificate of Substantial Completion, AIA Document G704, complete with signatures of Owner and Contractor, accompanied by Contractor's list of items to be completed or corrected ("Punchlist") as verified and amended by the Architect. Retainage amounts will be adjusted per General Conditions and Supplementary General Conditions.

1.03 FINAL INSPECTION

- A. Contractor shall submit written certification that:
 - 1. Contract Documents have been reviewed.
 - 2. Work has been completed and inspected in accordance with Contract Documents.
 - 3. Equipment and systems have been tested in presence of Owner's representative and are operational.
 - 4. Work is completed, and ready for final inspection.
 - 5. If any items from the Certificate of Substantial Completion Inspection are not completed, the final inspection will be terminated and the Contractor will be liable for the costs of re-inspection.

- B. Architect will make final inspection after receipt of certification.
- C. Should Architect consider that work is incomplete or defective:
 - 1. He shall promptly notify Contractor, in writing, stating reasons.
 - 2. Contractor shall take immediate steps to remedy the stated deficiencies, and send second written notice to Architect/Engineer certifying that Work is complete.
 - 3. Architect will re-inspect Work.
 - 4. Contractor to pay costs of Architect's re-inspection.
 - 5. Final payment will not be released.
- D. When Architect finds that work is acceptable in accordance with Contract Documents, he shall request contractor to prepare Project Closeout Submittals in accordance with Section 01 78 00.

1.04 GUARANTEES

- A. Contractor agrees to make good all damage to the construction of building or site or equipment which in the opinion of the Architect is a result of or incidental to the use of materials, equipment or workmanship which are inferior, defective or not in accordance with the specifications.
- B. In case repairs become necessary, the Owner will give written notice to the Contractor to make same and in case of failure of the Contractor to commence such repairs within 30 days after such notice, the Owner may make the repairs either by its own employees or by independent contract and may thereupon recover from the Contractor and his Sureties the cost of the repairs so made together with the cost of supervision and inspection thereof. The Owner will have sixty (60) days after the expiration of said guarantee period in which to notify the Contractor of any such repairs necessary on the date of such expiration. The determination of the necessity for repairs shall rest entirely with the Architect whose decision upon the matter shall be final and obligatory upon the Contractor.
- C. The Guarantees herein stipulated shall extend to the whole body of the improvement and all its appurtenances.

1.05 EVIDENCE OF PAYMENTS AND RELEASE OF LIENS

- A. Contractor to execute and submit:
 - 1. Contractor's Affidavit of Payment of Debts and Claims (AIA Document G706).
 - 2. Contractor's Affidavit of Release of Liens (AIA Document G706A)
 - 3. Consent of Surety to Final Payment (AIA Document G707).
- B. All submittals shall be duly executed before delivery to Architect.

1.06 FINAL ADJUSTMENT OF ACCOUNTS

- A. Submit final statement of account to Architect.
- B. Statement shall reflect all adjustments:
 - 1. Original Contract Sum.
 - 2. Additions and deductions resulting from:
 - a. Change Orders.
 - b. Cash Allowances
 - c. Contingency Allowance.
 - d. Deductions for uncorrected work
 - 3. Total Contract Sum, as adjusted.
 - 4. Previous payments.
 - 5. Sum remaining due.

- C. Architect will prepare final Change Order reflecting approved adjustments to Contract Sum not previously made by Change Orders or Allowance Adjustments.

1.07 FINAL APPLICATION AND CERTIFICATE FOR PAYMENT:

- A. Contractor shall submit final application in accordance with procedures and requirements of General and Supplementary Conditions prior to submission of Final Application and Certificate for Payment.
- B. Architect will review Final Application and issue Final Certificate in accordance with provisions of General Conditions.
- C. Should final completion be materially delayed through no fault of Contractor, Architect may issue a Semi-Final Certificate for Payment in accordance with provisions of General Conditions.

1.08 POST CONSTRUCTION INSPECTION

- A. Prior to expiration of one year from date of Substantial Completion, Architect may make visual inspection of Project in company with Owner and Contractor to determine whether correction of Work is required in accordance with provisions of General Conditions.
- B. For Guarantee beyond one year Architect may make inspections at request of Owner after notification to Contractor.
- C. Architect will promptly notify Contractor, in writing, of any observed deficiencies.
- D. Any/all corrections to work at that time to be at Contractor's expense.

END OF SECTION 01 77 00

SECTION 01 78 00 - CLOSEOUT SUBMITTALS

PART 1- GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Section Includes:
 - 1. Operation and Maintenance Manuals.
 - 2. Product Warranties.
 - 3. Project Record Documents (As-Built Drawings).
 - 4. Spare-Parts.
 - 5. Certificates of Inspection.
 - 6. Instruction of Owner's Personnel.
 - 7. Closeout maintenance materials required.
- B. Unless specifically permitted by the Architect, the Contractor is to provide all items listed herein to the Owner via the Architect prior to the date of Substantial Completion.

1.02 OPERATION AND MAINTENANCE MANUALS

- A. Submission Requirements:
 - 1. Furnish Owner with all manual information electronically on CD in PDF format.
 - 2. Furnish Owner with two (2) sets of bound hard copy manuals.
 - 3. Submit to Architect for review of information and forwarding to Owner for Owner's records.
- B. Preparation:
 - 1. Prepare data by personnel experienced in maintenance and operation of described products.
 - 2. Obtain information directly from manufacturer of equipment or product.
- C. Format:
 - 1. Prepare organization of data in the format of an instructional manual.
 - 2. Cover:
 - a. Identify manual with title OPERATION AND MAINTENANCE MANUAL.
 - b. Identify title of Project.
 - c. Identify subject matter of contents.
 - 3. Organization:
 - a. Divide sections for each separate product and system, with description of product and major component parts of equipment.
 - b. For any hard copies required, provide tabbed dividers between each section.
 - 4. Text:
 - a. Include all manufacturer's published data and product cutsheets.
 - b. For any hard copies required, provide on 20 pound paper.
 - 5. Drawings:
 - a. Provide applicable drawing files from manufacturer or Architect's drawing files as required. Contact Architect to obtain PDF drawing files as needed.
 - b. For any hard copies required, provide with reinforced punched binder tab. Bind in with text. Fold larger drawings to size of text pages.
 - 6. Binders (for any hard copies required):
 - a. Commercial quality, 8-1/2 x 11 inch three D side ring binders with durable plastic covers; 2 inch maximum ring size.
 - b. When multiple binders are used, correlate data into related consistent groupings.

D. Contents:

1. Table of Contents:
Provide title of Project; names, addresses, and telephone numbers of Architect/Engineer, Subconsultants, and Contractor with name of responsible parties; schedule of products and systems, indexed to content of the volume.
2. For Each Product or System:
List names, addresses and telephone numbers of Subcontractors and suppliers, including local source of supplies and replacement parts.
3. Product Data:
Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
4. Drawings:
Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
5. Typed Text:
As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.
6. Warranties:
Include a copy of each.
7. Reports:
Include a copy of all test reports, certificates, testing and balance data, etc.

E. Manual for Materials and Finishes:

1. Building Products, Applied Materials, and Finishes:
Include product data, with catalog number, size, composition, and color and texture designations. Provide information for re-ordering custom manufactured Products.
2. Instructions for Care and Maintenance:
Include manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.
3. Moisture Protection and Weather Exposed Products:
Include product data listing applicable reference standards, chemical composition, and details of installation. Provide recommendations for inspections, maintenance, and repair.
4. Additional Requirements:
As specified in individual Product specification Sections.
5. Provide a list of all materials and finishes with scanned photo files or actual samples of all products.

F. Manual for Equipment and Systems:

1. Each Item of Equipment and Each System:
Include description of unit or system, and component parts. Identify function, normal operating characteristics, and limiting conditions. Include performance curves, with engineering data and tests, and complete nomenclature and model number of replaceable parts.
2. Panelboard Circuit Directories:
Provide electrical service characteristics, controls, and communications; typed.
3. Operating Procedures:
Include start-up, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shut-down, and emergency instructions. Include summer, winter, and any special operating instructions.
4. Maintenance Requirements:
Include routine procedures and guide for preventative maintenance and trouble shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.

5. Include color coded wiring diagrams as installed.
6. Provide servicing and lubrication schedule, and list of lubricants required.
7. Include manufacturer's published operation and maintenance instructions.
8. Include sequence of operation by controls manufacturer.
9. Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
10. Provide control diagrams by controls manufacturer as installed.
11. Provide Contractor's coordination drawings, with color coded piping diagrams as installed.
12. Provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.
13. Provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.
14. Include test and balancing reports as specified in Section 23 05 93 - Testing, Adjusting and Balancing.
15. Additional Requirements as specified in individual Product specification Sections.
16. Provide a list of design data, settings, setpoints, etc., as applicable for equipment.

1.03 PRODUCT WARRANTIES

A. Submission Requirements:

1. Furnish Owner with all warranty information electronically on CD in PDF format.
2. Furnish Owner with two (2) sets of bound hard copy warranties.
3. Submit to Architect for review of information and forwarding to Owner for Owner's records.

B. Preparation:

1. Gather Warranties required for specific Products or Work as specified in each individual Section.
2. Obtain information directly from responsible Subcontractor, supplier, and manufacturer of equipment or product within 10 days after completion of applicable item of Work.
3. Except for items put into use with Architect approval, leave date of beginning of time of warranty until the Date of Final Acceptance is determined.
4. Verify that documents are in proper form, are complete, contain full information, are notarized, and are fully executed and valid.
5. Co-execute submittals when required.
6. Retain warranties until time specified for submittal.

C. Format:

1. Prepare organization of data in the format of an instructional manual.
2. Cover:
 - a. Identify manual with title WARRANTIES.
 - b. Identify title of Project.
 - c. Identify subject matter of contents.
3. Organization:
 - a. Separate each warranty keyed to the Table of Contents listing.
Provide full information, using separate typed sheets as necessary.
 - b. List Subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal.
 - c. For any hard copies required, provide tabbed dividers between each warranty.
4. Binders (for any hard copies required):
 - a. Commercial quality, 8-1/2 x 11 inch three D side ring binders with durable plastic covers; 2 inch maximum ring size.
 - b. When multiple binders are used, correlate data into related consistent groupings.

D. Contents, Each Volume:

1. Table of Contents:

Neatly typed, in sequence of Table of Contents of Project Manual, with each item identified with number and title of specification Section in which specified, and name of Product or Work item.

E. Time of Submittals:

1. For equipment or component parts of equipment put into service during construction with Architects approval, submit documents within 10 days after acceptance.
2. Make other submittals within 10 days after Date of Final Completion, prior to final Application for Payment.
3. For items of Work for which acceptance is delayed beyond Date of Final Completion, submit within 10 days after acceptance.

1.04 PROJECT RECORD DRAWINGS ("AS-BUILTS")

A. Submission Requirements:

1. Furnish Owner with original record document prints.
2. Furnish Owner with one (1) additional hard copy set of record document prints.
3. Furnish Owner with all as-built information electronically on CD in PDF format.
4. Submit to Architect for review of information and forwarding to Owner for Owner's records.

B. Project Record Documents required:

1. Marked-up copies of Contract Drawings.
2. Marked-up copies of Shop Drawings.
3. Marked-up copies of Specifications, addenda and Contract Modifications.
4. Marked-up Product Data submittals.
5. Field records for variable and concealed conditions.
6. Record information on Work that is recorded only schematically.

C. Maintenance of Documents:

Store record documents in field office apart from Contract Documents used for construction. Do not permit Project Record Documents to be used for construction purposes. Maintain and protect record documents from damage in a clean, dry, legible condition. Make documents available at all times for inspection by Architect.

D. Record Drawings:

1. During construction, maintain a set of black-line white-prints of Contract Drawings and Shop Drawings for Project Record Document purposes.
 - a. Mark these Drawings to indicate actual installation where installation varies from installation shown originally. Give particular attention to information on concealed elements which would be difficult to identify or measure and record later. Items required to be marked include but are not limited to:
 - 1) Dimensional changes to Drawings.
 - 2) Revisions to details shown on Drawings.
 - 3) Revisions to routing of piping and conduits.
 - 4) Revisions to electrical circuitry.
 - 5) Actual equipment locations.
 - 6) Locations of concealed internal utilities.
 - 7) Changes made by Contract Modification.
 - 8) Details not on original Contract Drawings.

- b. Responsibility for Markup and Supervision:
Contractor Quality Control Representative; as specified in Section 01 45 00 - Quality Control. Where feasible, individual or entity who obtained record data, whether individual or entity is installer, subcontractor, or similar entity, is required to prepare mark-up on Record Drawings.
 - 1) Accurately record information in an understandable Drawing technique.
 - 2) Record data as soon as possible after it has been obtained. In case of concealed installations, record and check mark-up prior to concealment.
 - 3) Contractor Quality Control Representative: Affix signature and certify accuracy of Record Drawings.
- c. Mark completely and accurately record prints of Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions. Where Shop Drawings are marked, show cross-reference on Contract Drawings location.
- d. Mark record sets with red erasable colored pencil; use other colors to distinguish between changes for different categories of Work at same location.
- e. Mark important additional information which was either shown schematically or omitted from original Drawings.
- f. Note construction change directive numbers, alternate numbers, Contract Modification numbers and similar identification.
- g. At time of Final Acceptance, submit record Drawings to Architect for Owner records. Organize into sets, bind and label sets for Owner's continued use.
- 2. Copies and Distribution:
After completing preparation of transparency Record Drawings, print (three) 3 black-line prints of each Drawing, whether or not changes and additional information were recorded. Organize copies into manageable sets. Bind each set with durable paper cover sheets, with appropriate identification, including titles, dates and other information on cover sheets.
 - a. Organize and bind original marked-up set of prints that were maintained during construction in same manner.
 - b. Organize record transparencies into sets matching print sets. Place each set in durable tube-type Drawing containers with end caps. Mark end cap of each container with suitable identification.

1.05 SPARE-PARTS

- A. Provide Products, replacement stock, spare parts, maintenance, and extra materials in quantities specified in individual specification Sections.
- B. Deliver to Project Site and place in location as directed by Architect; obtain receipt prior to Final Payment.

1.06 CERTIFICATES OF INSPECTION

- E. Electrical.

1.07 INSTRUCTION OF OWNER'S PERSONNEL

- A. Prior to final inspection or acceptance, fully instruct Owner's designated operating and maintenance personnel in the operation, adjustment, and maintenance of all products, equipment and systems.
- B. Such instructions shall occur at a time designated by the Architect/Engineer at the completion of the job at a meeting set up by the contractor and attended by the representatives of the Owner and manufacturer.

- C. Services of factory instructor or representative to teach Owner's representative on operation of equipment will be arranged by the contractor, shall begin after equipment has been placed in satisfactory operating condition and shall continue for a period of time as deemed necessary by the Architect.
- D. Contractor shall verify in writing that such periods of instruction have been held with the Owner's representative.
- E. Minimum length of training session to be two (2) hours.
- F. Session will need to be videotaped by Contractor for use by Owner.
- G. Notify Architect to attend all training sessions.

1.08 CERTIFICATE OF OCCUPANCY

- A. Where the Local Authority of Location of project requires either temporary or permanent Certificate of Occupancy, obtain and pay for Certificates and furnish a copy to the Architect for forwarding to the Owner.
- B. Contractor to verify requirements with Local Building Officials.

1.09 CERTIFICATION OF ASBESTOS MATERIAL AND LEAD-BASED PAINT

- A. The use of asbestos containing materials, in excess of 1 percent as defined by applicable US Environmental Protection Agency regulations, is prohibited in the project.
- B. The use of lead-based paint is prohibited in the project.
- C. Prepare and submit to the Architect the "Certification of Asbestos and Lead-Based Paint (Existing Building) " for existing buildings or portions of buildings (attached).
- D. Prepare and submit to Architect the "Certification of Asbestos and Lead-Based Paint (New Work) " for new material furnished or installed as part of the Work (attached).

END OF SECTION 01 78 00

Certification of Asbestos and Lead-Based Paint
(Existing Building)

To: Kovert Hawkins Architects, Inc.
Subject: Certification for a building built after 1990
Facility name: _____
Facility address: _____

Certification for existing building:

I / We certify under penalty of perjury under the laws of the United States that the following is true and correct. This building was constructed after 1990 and is free of asbestos containing material in excess of 1 percent as defined by applicable US Environmental Protection Agency regulations, and lead-based paint except as specifically listed below. This certification includes all areas of the building(s), including but not limited to; the roof and flooring.

Owner name: _____

Signature: _____

Address: _____

Telephone: _____ Date executed: _____

Materials containing asbestos/lead-based paint	Location/room within facility

The penalty for making a false statement is prescribed by 18 USC 1001.

Certificate of Asbestos and Lead-Based Paint
(New Work)

To: Kovert Hawkins Architects, Inc.
Subject: Certification for new construction
Facility name:

Facility address:

Certification for new construction:

This Contractor hereby certifies that no asbestos-containing material in excess of 1 percent as defined by applicable US Environmental Protection Agency regulations, and lead-based paint has been furnished or installed at the referenced project.

Contractor name:

Signature:

Address:

Telephone: _____

Date executed: _____

The penalty for making a false statement is prescribed by 18 USC 1001.

CLOSEOUT SUBMITTALS

01 78 00-8

SECTION 01 78 46 - CLOSEOUT MAINTENANCE MATERIALS

PART 1- GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Section Includes:
1. Maintenance Materials.
 2. Owner Verification.

1.02 MAINTENANCE MATERIALS

- A. General Requirements:
1. No maintenance stock to be used by the Contractor for any reason.
 2. Provide maintenance stock for each and every style, type or color specified for each product.
 3. Provide maintenance stock at end of the project and directly to the Owner.
 4. Wrap and protect all materials for storage by the Owner.
 5. Packages and containers to be manufacturer's unopened and unsealed packaging.
If quantities listed exceed a manufacturer's single container, additional unopened and unsealed containers shall be supplied until minimum quantity is met.
 6. Packages and containers shall include manufacturer's label and product information.
- B. Rubber Base:
1. Provide to Owner maintenance stock of at least (20) linear feet.
- C. Paint:
1. Provide to Owner maintenance stock of at least (2) unopened gallon containers.

1.03 OWNER VERIFICATION

- A. Owner to sign-off receipt of each item.
- B. Provide to Architect, copy of this Specification Section with Owner's signature next to each item listed, verifying that they have been received by the Owner's representative and entered into their stock.

END OF SECTION 01 78 46

SECTION 02 41 19 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Section Includes:
 - 1. Selective Demolition work included in project.
 - 2. Project demolition conditions.
 - 3. Electrical, Plumbing and HVAC Demolition.
 - 4. Utility demolition.
 - 5. Subsurface filling.
 - 6. Protection.

1.02 WORK INCLUDED

- A. The extent of demolition work shown on drawings and specified herein, including, but not limited to:
 - 1. Opening of exterior walls for new doors, windows, grilles, louvers, mechanical, and electrical and providing weather-tight enclosures.
 - 2. Opening of interior walls, ceilings and floors necessary for proper installation of new materials, equipment, mechanical or electrical items.
 - 3. Removing interior walls, ceilings, floor finishes.
 - 4. Removing casework and equipment.
 - 5. Removing existing HVAC system and components, both exposed to view and concealed.
 - 6. Removing existing plumbing fixtures, piping and components, both exposed to view and concealed.
 - 7. Removing existing lighting switches, outlets, conduit and other devices both exposed to view and concealed.
- B. Interior demolition includes complete wrecking of finishes and removal and disposal of demolished materials, as shown on drawings and herein specified.
- C. The Owner shall have the option of retaining any item removed. The Contractor shall deliver these items to the Owner's designated storage area. Any items not retained by the Owner shall be disposed of offsite by the Contractor. All items are to remain property of the Owner unless specifically designated otherwise.
- D. Some removed items are to be salvaged for re-use. Drawings indicate extent of such work.

PART 2 - PRODUCTS

Not Applicable

PART 3 - EXECUTION

3.01 PROJECT DEMOLITION CONDITIONS

- A. Conditions of Structures:
 - 1. The Owner assumes no responsibility for actual conditions of structures to be demolished.
- B. Conditions of the structure existing at time of inspection for bidding purposes will be maintained by Owner in so far as possible. However, variations within structure may occur by Owner's removal and salvage operations prior to start of demolition work.
- C. Pollution Controls:
 - 1. Use water sprinkling, temporary enclosures, and other suitable methods to limit dust and dirt rising and scattering in air to lowest practical level.

2. Comply with governing regulations pertaining to environmental protection.
- D. Do not use water when it may create hazardous or objectionable conditions such as ice, flooding, and pollution.
- E. Clean adjacent structures and improvements of dust, dirt, and debris caused by demolition operations. Return adjacent areas to condition existing prior to the start of work.
- F. Partial Removal:
 1. Items of salvable value to Contractor, and not retained by Owner, may be removed from structure as work progresses. Salvaged items must be transported from site as they are removed.
 2. Storage or sale of removed items on site will not be permitted.
 3. Store items noted on drawings and specified to be salvaged for use in the project, so as to prevent damage or deterioration.
- G. Disposal of Demolished Materials:
 1. Remove from site debris, rubbish, and other materials resulting from demolition operations. Pay all fees related to removal and dumping.
 2. Remove and dispose of interior demolition debris off job site.
 3. Burning of removed materials from demolished structures will not be permitted.
 4. Transport materials removed from demolished structures and dispose of off site.
- H. Traffic:
 1. Conduct demolition operations and removal of debris to ensure minimum interference with roads, streets, walks, occupied areas, and other adjacent occupied or used facilities.
 2. Do not close or obstruct streets, walks or other occupied or used facilities without permission from Owner and authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.
- I. Protections:
 1. Ensure safe passage of persons around or through area of demolition. Conduct operations to prevent injury to adjacent buildings, structures, other facilities, and persons. Provide protection in accordance with ANSI/NFPA 241.
 2. Erect temporary covered passageways as required by the Owner or authorities having jurisdiction.
- J. Use of explosives will not be permitted.
- K. Provide temporary enclosures at doors and other penetrations in walls, necessitated by weather and demolition conditions, and where dust proof partitions are indicated. Enclosures shall be constructed with fire retardant treated lumber, insulated and painted. Joints shall be taped and caulked to prevent dust and debris from migrating beyond construction areas. Maintain enclosures in good repair and remove when no longer needed. Extend partitions to deck.
- L. Repair any damage to property which is to remain in use, or that of any person, or persons on or off site caused by the demolition work without additional expense to Owner.
- M. Where a portion of construction (walls, floors, ceilings, etc.) is indicated to be removed, demolition shall include the removal of any and all items either surface-mounted on it, or concealed within it, unless otherwise indicated to remain or be salvaged for reuse.

3.02 ELECTRICAL

- A. Visit the site before submitting a bid to observe existing conditions.

SELECTIVE DEMOLITION

- B. Work in existing building shall be scheduled well in advance with the Owner. Work shall be performed at such times and under such conditions as suit the convenience of the Owner. Plan the Work to minimize disruption of normal operations.
- C. Remove wiring devices, fixtures, components, electrical equipment, conductors, boxes and conduits not required to remain in service in remodeled areas when this Project is complete.
- D. Reconnect circuits to other panelboards when necessary to complete the renovation.
- E. Remove existing conduit and wire from areas to be remodeled, back to panelboard, cabinet or junction box. Where such Work would not be possible without disturbing areas not being renovated, consult with the Architect prior to performing the Work.
- F. When outlets are covered up or are otherwise rendered inaccessible, all wiring shall be removed to the source. If a circuit that must remain in service is interrupted, it shall be reconnected by the most inconspicuous means so that it remains operational, with the same capacity as before. All building surfaces damaged, and openings left by removal of boxes, conduit, or other equipment shall be repaired. All holes left in junction boxes, switches, panels and other equipment shall be closed.
- G. Where new openings are cut and concealed conduits or other electrical items are encountered, they shall be removed or relocated as required. Where conduit to be removed stubs through floors, walls, and ceilings, such conduit shall be removed to the point where the finished surfaces can be patched so that no evidence of the former installation remains.
- H. Where a circuit is interrupted by removal of a device or fixture from that circuit, install wire and conduit as required to restore service to the remaining devices and fixtures on that circuit. If the interrupted piping is concealed in walls or under floors, an alternate route may be required.
- I. Lighting fixtures, wiring devices, panelboards, and conductors removed shall be offered to the Owner's Representative. If he chooses to retain these items or a part of these items, turn those chosen over to him. Items rejected by Owner's Representative shall be removed from the project site by the Contractor.

3.03 PLUMBING

- A. Visit the site before submitting a bid to observe existing conditions.
- B. Work in existing building shall be scheduled well in advance with the Owner. Work shall be performed at such times and under such conditions as suit the convenience of the Owner. Plan the Work to minimize disruption of normal operations.
- C. Remove piping, fixtures, components, valves, insulation and fittings not required to remain in service in remodeled areas when this Project is complete.
- D. Reconnect piping to provide service when required to complete the renovation.
- E. Remove existing piping from areas to be remodeled, back to service branch. Where such Work would not be possible without disturbing areas not being renovated, consult with the Architect prior to performing the Work.
- F. When outlets are covered up or are otherwise rendered inaccessible, all piping shall be removed to the source. If a fixture that must remain in service is interrupted, it shall be reconnected by the most

inconspicuous means so that it remains operational, with the same capacity as before. All building surfaces damaged, and openings left by removal of fixtures, piping, or other equipment shall be repaired. All holes left shall be closed.

- G. Where new openings are cut and concealed piping or other plumbing items are encountered, they shall be removed or relocated as required. Where piping to be removed stubs through floors, walls, and ceilings, such piping shall be removed to the point where the finished surfaces can be patched so that no evidence of the former installation remains.
- H. Where piping is interrupted by removal of a piping or fixture, install piping as required to restore service to the remaining fixtures on that service line. If the interrupted circuit is concealed in walls or under floors, an alternate route may be required. If the interrupted piping is concealed in walls or under floors an alternate route may be required.
- I. Plumbing fixtures, valves, and gages removed shall be offered to the Owner's Representative. If he chooses to retain these items or a part of these items, turn those chosen over to him. Items rejected by Owner's Representative shall be removed from the project site by the contractor.

3.04 HVAC

- A. Visit the site before submitting a bid to observe existing conditions.
- B. Work in existing building shall be scheduled well in advance with the Owner. Work shall be performed at such times and under such conditions as suit the convenience of the Owner. Plan the Work to minimize disruption of normal operations.
- C. Remove piping, ductwork, equipment, components, valves, insulation, fittings and controls not required to remain in service in remodeled areas when this Project is complete.
- D. Reconnect piping and ductwork to provide service when required to complete the renovation.
- E. Remove existing piping and ductwork from areas to be remodeled, back to service branch. Where such Work would not be possible without disturbing areas not being renovated, consult with the Architect prior to performing the Work.
- F. When grilles and diffusers are covered up or are otherwise rendered inaccessible, all ductwork shall be removed to the source. If an HVAC equipment item which must remain in service is interrupted, it shall be reconnected by the most inconspicuous means so that it remains operational, with the same capacity as before. All building surfaces damaged, and openings, left by removal of grilles, piping, or other equipment shall be repaired. All holes left shall be closed.
- G. Where new openings are cut and concealed piping, ductwork, or other HVAC items are encountered, they shall be removed or relocated as required. Where piping, ductwork or controls to be removed stubs through floors, walls and ceilings, such items shall be removed to the point where the finished surfaces can be patched so that no evidence of the former installation remains.
- H. Where piping or ductwork is interrupted by removal of a branch or equipment, install material as required to restore service to the remaining items on that service line. If the interrupted piping or duct is concealed in walls or under floors, an alternate route may be required.
- I. HVAC equipment, valves, and gages removed shall be offered to the Owner's Representative. If he chooses to retain these items or part of these items, turn those chosen over to him. Items rejected by Owner's Representative shall be removed from the project site by the Contractor.

- J. Equipment removed from roof shall include curbs, sleepers, flashing boxes, etc. Install new roof decking to match existing. Install roof insulation and matching membrane system to maintain any roof warranties.
- K. Equipment removed from finished interior spaces shall include patching and restoration to match all adjacent finishes.
- L. All temperature controls shall be maintained, rerouted, reconnected, or reprogrammed to maintain operation of HVAC equipment.

3.05 UTILITY DEMOLITION

- A. Utility Services:
 - 1. Maintain existing utilities indicated to remain, keep in service, and protect against damage during demolition operations.
 - 2. Allow no interruption in service unless coordinated with Owner at least 72 hours in advance.
- B. Do not interrupt existing utilities serving occupied or used facilities, except when authorized in writing by authorities having jurisdiction. Provide temporary services during interruptions to existing utilities, as acceptable to governing authorities.
- C. Disconnect and seal utilities serving each structure to be demolished, or interior area to be demolished, prior to start of demolition work.
- D. If utility service or other services to an occupied area (such as emergency power, heating, medical gas, air conditioning), are to be disconnected, provide temporary or alternative service to that area.
- E. Mark location of disconnected utilities. Identify and indicate capping location on project record documents.

3.07 PROTECTION

- A. Provide temporary construction in accordance with requirements of Section 01 53 00 - Temporary Construction as required in all areas of demolition work.
- B. Provide levels of protection as deemed necessary by Owner for protection of public into space, project, and site.

END OF SECTION 02 41 19

SECTION 09 29 00.01 - GYPSUM DRYWALL – STEEL STUD CONSTRUCTION

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Gypsum wallboard and gypsum drywall finish as shown on Drawings and specified herein.
- B. Non-load bearing interior partition steel stud construction as shown on Drawings and specified herein.

1.02 QUALITY ASSURANCE

- A. Gypsum wallboard construction shall comply with all laws, ordinances, rules, regulations and orders of public authorities having jurisdiction.
- B. All material shall be from a single manufacturer.
- C. Installation of steel framing members to receive gypsum wallboard shall comply with ASTM C754.

1.03 REFERENCES

- A. Comply with applicable requirements of ANSI/ASTM C 840 for application and finishing of gypsum board, unless otherwise indicated.
- B. Gypsum board terminology standard: GA-505 by Gypsum Association.

1.04 DELIVERY, STORAGE AND HANDLING

- A. All materials shall be delivered to the job in their original, unopened containers or bundles, stored in a place providing protection from damage and exposure to the elements. Remove damaged or otherwise unsuitable material from the job site.

1.05 SUBMITTALS

- A. Product Data:
Manufacturer's literature, materials description, cutsheets and recommended installation instructions for systems use.

PART 2 - PRODUCTS

2.01 GYPSUM BOARD

- A. Gypsum Board (Non-Fire Rated Assemblies):
 - 1. Provide one of the following approved products:
 - a. "Georgia-Pacific"; Gypsum Sheathing.
 - b. "USG"; Sheetrock Gypsum Panels.
 - c. "Certaineed"; M2Tech Gypsum Board.
 - 2. Manufacture to meet specifications for FS SS-L-30, ASTM C 36 and ASTM C 1396.
 - 3. Provide in maximum lengths available to minimize end-to-end butt joints.
 - 4. Standard type, regular gypsum core gypsum board for all areas, except as otherwise indicated. If needed for specified thickness, provide product in Type X gypsum core.
 - 5. Thickness: 5/8 inch.
 - 6. Width: 4 feet.
 - 7. Length: 8 feet minimum.
 - 8. Edges: Tapered.

2.02 STEEL STUDS

- A. Provide Steel Stud Systems, as approved by the Architect, by one of the following manufacturers:

1. "U.S. Gypsum Company" (USG).
 2. "National Gypsum Company".
 3. "Georgia-Pacific".
 4. "Clark Dietrich Building Systems".
 5. "Phillips Manufacturing Co."
 6. "Marino/Ware".
 7. "CEMCO Steel".
 8. "Flex-Ability Concepts".
 9. "MBA Metal Framing".
 10. "Dale/Incor".
 11. "Superior Steel Studs".
- B. System Components:
1. With each type of metal stud and joist required, provide manufacturer's standard runners (tracks), shoes, clips, ties, stiffeners, fasteners, grommets to protect electrical wiring, door jamb reinforcers and accessories as recommended by the manufacturer for the applications indicated, and as needed to provide a complete metal stud system. Where special types, conditions, or products are indicated, provide as required to match gauge, depth and section of associated wall construction.
- C. Non-Load Bearing Screw Type Steel Studs:
1. Manufacturer's standard formed light gauge steel studs of the height, size, and gauge indicated, with punched webs to facilitate erection of system and passage of mechanical/electrical service lines. Lateral loading shall have a minimum of 5 lbs. per sq. ft.
 2. Steel stud framing at interior partitions:
 - a. Gauge: minimum 20 gauge and 30 mils thickness, ASTM C645.
 - b. Depth of Section: 3-5/8 inches, unless otherwise indicated on drawings.
 - c. Flange width: Not less than 1.25 inches.
 - d. Shape: Cee shape (returned flanges).
 - e. Steel and Finish: ASTM A591, commercial quality electrolytic zinc coated steel, class B.
 - f. Face of flanges: Knurled to facilitate use of self-tapping fasteners.
 - g. Use 1-1/2 inches cold rolled channel at 48 inches o.c. horizontally above interior ceiling.
 - h. Floor and Ceiling Tracks: Cold formed channel shape, galvanized, width as required to receive studs, and flange/leg size not less than 1.25 inches.
 - i. Double 20 gauge studs at all door and window jambs.
- D. Deflection Stud Runners:
1. Equal to: "Clark Dietrich Building Systems", SLP-TRK.
 2. Positive attachment secured through sides of track, to allow up to 1" vertical movement.
 3. Match gauge, depth and section of associated vertical metal stud wall members, minimum 20 gauge and 30 mils thickness.
 4. Flange/leg size not less than 1.25 inches.
 5. UL approved for use in fire rated assemblies, where applicable.
- E. Flexible Steel Stud Runners and Tracks:
1. Equal to: "Flex-Ability Concepts", "FLEX-C TRAC".
 2. Galvanized steel sheet track.
 3. Zinc-coated steel side bands.
- F. Furring Channels or Strips:
1. 7/8" or 1-1/2", as indicated on Drawings. If not indicated, provide 1-1/2".
 2. 20 gauge, minimum.
 3. Cee shape or Hat Channel profile.

2.03 MATERIALS AND COMPONENTS

- A. Fasteners:
 - 1. Type S and S-12 screws, bugle head or pan head.
 - 2. Sized to provide 3/8 inch penetration beyond thickness of wallboard.
- B. Accessories:
 - 1. Corner reinforcements, casing beads and metal trim, fabricated from 26 gauge galvanized sheet steel with perforated flanges, designed to receive joint compound.
- C. Control Joints:
 - 1. "USG", "No. 093".
- D. Suspension System for Suspended Gypsum Board Ceiling:
 - 1. "USG/Donn", "Rigid X".
- E. Hangar Wires:
 - 1. ASTM A-641, 12 gauge, 0.475 lbs/ft.

PART 3 - EXECUTION

3.01 INSTALLATION OF WALLBOARD

- A. Single Layer Wallboard - Metal Stud Partitions:
 - 1. Secure metal runners to concrete slabs with power driven anchors, space 24 inches o.c.
 - 2. Space metal studs 16 inches o.c. and locate studs at door and window frames, partition intersections and corners. Locate studs within 2 inches of all door-frame jambs and anchor to jamb and head anchor clips of frame by screw attachment. Over frames a cut-to-length stud extending from door frame header to ceiling runner shall be positioned over vertical joints over door frame. Anchor all frames at jamb anchor clips, after stud and before gypsum wallboard is installed.
 - 3. Sound attenuation blankets shall be pressure-fit between studs.
 - 4. Apply single layer wallboard face out with long dimension vertical. All abutting ends and edges shall occur over stud on different studs. Screws shall be spaced 12 inches o.c. in field of board and 8 inches o.c. staggered along vertical edges.
 - 5. Use wallboard of maximum practical lengths to minimize end joints.
 - 6. Use single panel to span entire length of width of surface where possible.
 - 7. Stagger end joints when they occur.
 - 8. Locate end joints as far as possible from center of wall or ceiling.
 - 9. Butt wallboards without forcing
 - 10. Support ends and edges of wallboard panels on framing or furring members.
- B. Accessories:
 - 1. Corner beads shall be installed on all exterior corners attached with suitable fasteners spaced 9 inches o.c. on both sides, and shall be in single lengths unless corner exceeds standard stock lengths.
 - 2. Metal trim shall be installed over face-layer wallboard, attached with suitable fasteners spaced 9 inches o.c. and shall be in single lengths unless application length exceed standard stock lengths.
 - 3. Wallboard screws shall be applied with an electric driver.
 - 4. Provide control joints at maximum 28'-0" o.c. If additional shrinkage cracks occur, install control

joints and patch cracks.

C. Joint Treatment:

1. Finish all joints and interior corners with joint tape and joint compound.
 - a. Apply joint compound sufficiently thick to hide board surface at angles and joints. Cover nail/screw heads and depressions with compound.
 - b. Apply tape, squeeze out excess compound and cover tape with compound.
 - c. When first coat has thoroughly dried apply two coats of compound, extending each coat slightly beyond previous coat. Sand to smooth, flat surface, ready for specified finish.

D. Finish:

1. Level 5 finish at all exposed areas.
2. No textured walls or ceilings.

3.02 CLEANING

- A. Remove soil, stain caused by drywall installation.

SUBMITTAL CHECKLIST

1. Product Data.

END OF SECTION 09 29 00.01

SECTION 09 65 13.13 - RUBBER BASE

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Section Includes:
 - 1. Rubber Base.
- B. Furnish labor, materials, equipment, special tools, supervision and services required to install the products and systems complete as shown on the Drawings and/or specified herein.

1.02 SUBMITTALS

- A. Manufacturer's Literature:
 - 1. Manufacturer's product data and descriptive literature.
 - 2. Manufacturer's installation instructions.
 - 3. Manufacturer's maintenance instructions.
 - 4. Material safety data sheets.
- B. Samples:
 - 1. Base:
 - a. Full size sections of colors as specified on drawings. Color charts alone are not acceptable.
 - b. If color is not specified, submit samples of manufacturer's entire selection.

1.03 DELIVERY, STORAGE AND HANDLING

- A. Receive all products and materials as packaged by the manufacturer with manufacturer's seals and labels intact. Store materials at the job site within the building and in a dry place at least 48 hours before installing flooring materials.
- B. Store in space with temperature maintained between 65 degrees F and 90 degrees F.

1.04 MAINTENANCE MATERIALS AND DATA

- A. See Specification Section 01 78 46 - Closeout Maintenance Materials.
- B. Submit maintenance data under provisions of Section 01 78 00 - Closeout Submittals.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Rubber Base:
 - 1. FS SS-W-40A, Type I, TS rubber.
 - 2. Meets ASTM F-1860, Group 1.
 - 3. 1/8" thickness, 120' rolls, coved, set-on type.
 - 4. 4" high unless otherwise shown.
 - 5. Color to be selected from manufacturer's entire offering.
- B. Adhesive:
 - 1. Water and alkali resistant, complying with recommendations of resilient base manufacturer.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Spaces shall be at a minimum temperature of 70 degrees F. Temperature shall be maintained during and 48 hours after installation.
- B. Surfaces shall meet the minimum requirements of the manufacturer of the base. Commencement of installation of materials constitutes acceptance of the substrates.
- C. Work shall not be started until all items penetrating the flooring and walls at locations of installation have been installed.
- D. No base shall be installed until the installer has ascertained that the chemical treatment of substrates will not interfere with the successful application of the flooring materials.
- E. When solvent-based adhesives are used, the space shall be ventilated; use spark proof fans if natural ventilation is inadequate. Prohibit all smoking.
- F. Before installing base, test wall surfaces for acceptable adhesion and bonding of new materials atop substrate. If proper adhesion and bonding are not apparent, do not install base until sealer and primer are applied.

3.02 INSTALLATION

- A. Install base and products in accordance with the manufacturer's recommendations.
- B. Mix and apply adhesive as recommended by the manufacturer. Lay base true to line, level, and with tight joints. Cut base to and around all permanent cabinets and bases.
- C. Apply base to walls, columns, pilasters, casework, and other permanent fixtures in rooms or areas where base is required. Install base in lengths as long as practicable with continuous wrapping outside corners, and miter cut inside corners. Do not use preformed corner pieces.
- D. Remove excessive adhesive in accordance with base manufacturer's instructions.
- E. After installation, maintain a minimum space temperature of 55 degrees F.
- F. Installation of rubber base at bullnose block:
 - 1. Applies to all rubber base products designed for square corners, not bullnose type.
 - 2. Traditional wall base profiles should be able to wrap the radius of the wall surface with no issues, but if issues exist, adhesion is a problem, a short return exists, or profiles are non-standard, then the use of a heat gun and pipe shall be required.
 - 3. The material shall be draped over the pipe that matches the radius of the wall, then apply heat to the surface until the material softens.
 - 4. Next the base shall be placed into a container of cold water to change the memory and profile.
 - 5. Then the pieces shall be cut to the proper and full length of the area and return.
 - 6. Apply contact adhesive, type as per the manufacturer's recommendations, for short returns.

3.03 CLEANING

- A. Not less than 4 days after flooring installation, clean all base. Wash thoroughly, with a cleaner recommended by the flooring manufacturer, in accordance with flooring manufacturer's recommendations.

SUBMITTAL CHECKLIST

- 1. Manufacturer's Literature.

BNL: PAC THEATER LIGHTING REPLACEMENT
NORTH LAWRENCE COMMUNITY SCHOOLS

1909.01
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2. Samples.

END OF SECTION 09 65 13.13

RUBBER BASE

09 65 13.13-3

SECTION 09 90 00 - PAINTING

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Extent of painting work as indicated on the Drawings and specified herein including, but not limited to:
 - 1. Surface Inspection and Preparation.
 - 3. Paint System Schedule - Interior Paint Systems.
- B. Additional requirements of the work are to include:
 - 1. Painting and finishing of all interior items and surfaces throughout the project, except as otherwise indicated. Surface preparation, priming and costs of paint specified are in addition to shop-priming and surface treatment specified under other sections of work.
 - 2. Field painting of exposed steel and ironwork, and primed metal surfaces of equipment installed under mechanical and electrical, except as otherwise indicated.
 - 3. Field painting of all exposed interior structural steel components, whether indicated or not on the Drawings. Includes painting of galvanized components unless noted otherwise.
 - 4. Painting of exposed mechanical, electrical equipment items as indicated on the Drawings.
 - 5. Paint exposed surfaces except where natural finish of material is specifically noted as a surface not to be painted. Where items or surfaces are not specifically mentioned, paint same as adjacent similar materials or areas.
 - 6. "Paint" as used herein generally refers to all coating systems material, including primers, emulsions, enamels, stains, sealers, fillers, and other applied materials whether used as prime, intermediate or finish coat.

1.02 RELATED WORK

- A. Following areas are to be included as special considerations of areas to NOT receive paint:
 - 1. Operating parts and labels, moving parts of operating units, mechanical and electrical parts, such as valve and damper operators, unless otherwise indicated.
 - 2. Any code-required labels, such as Underwriter's Laboratories and Factory Mutual, or any equipment identification, performance rating, name or nomenclature plates.

1.03 SUBMITTALS

- A. Product Data:
 - 1. Manufacturer's published product data sheets, specifications, materials description and technical information.
 - 2. Manufacturer's published installation and application instructions.
 - 3. Materials Safety and Data Sheets (MSDS).
- B. Samples and Draw Downs:
 - 1. If colors and finishes are indicated, submit samples boards (draw downs) for each as selected.
 - 2. If colors are not indicated, they will be selected by the Architect from manufacturer's entire selection. Submit complete range of available paint colors, either in the form of a fan set or individual color chips box set.
 - 3. If finishes are not indicated, they will be selected by the Architect from manufacturer's entire selection.
 - 4. Once colors and finishes have been chosen, submit samples boards for each color selected.
 - 5. Sample boards to be 8-1/2 inch x 11 inch cardstock, painted with actual product of color and finish as selected by the Architect. Submit three (3) of each color as selected.
- C. Mock-Ups:
 - 1. Paint on site, a test sample area of wall, 2 foot x 2 foot minimum in size. Complete test area for each color selected, for each paint system specified, and per each substrate material included, as

directed by the Architect.

2. Mock-ups shall indicate color, texture and finish.
3. Do not proceed with paint work until mock-ups have been approved by the Architect.
4. If deemed unacceptable by the Architect, create another mock-up to correct items of unacceptability. Continue process until an approved mock-up has been achieved.
5. Once an approved mock-up has been achieved, use as a standard of comparison for all work.
6. Do not destroy or remove mock-up until all paint work is complete and accepted.
7. Accepted mock-ups may remain as part of the work or discarded, at the discretion of the Architect.

D. Compatibility Tests:

1. Paint on site, (2) 2 foot x 2 foot minimum test sample areas of each existing and/or previously painted surface to receive new painted finish atop. Complete test area for each color selected, for each paint system specified, per each existing color of existing surface, and per each substrate material included, as directed by the Architect.
2. Check for compatibility by applying the test sample of the recommended coating system as stated. Allow to dry for one week prior to testing adhesion per procedures of ASTM D3359.
3. Test sample areas are to be completed by the installing contractor, reviewed and checked on site by the paint manufacturer's representative. If non-compatibility issues exist, the paint manufacturer shall provide recommendations and solutions to compatibility and/or alterations to the paint system specified.
4. Submit all test results and manufacturer's approval in writing to the Architect. Painting manufacturer must certify that they approve the test results and will include the longevity and performance of the paint system in their warranty and guarantees of the paint system.

1.04 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to job site in original, new, sealed and unopened packages and containers bearing manufacturer's name and product label.
- B. Store and protect products in strict accordance with manufacturer's recommendations and requirements.
- C. Provide physical properties of each product to be used on the project, including:
 1. Weight per gallon.
 2. Solids by weight.
 3. Solids by volume.
 4. V.O.C. as supplied.
- D. Container labeling to include:
 1. Date of manufacture.
 2. Manufacturer's name.
 3. Product name, type and stock number.
 4. Color and finish.
 5. Rate of coverage.
 6. Application instructions for surface preparation, drying time, cleanup, mixing and reducing.
- E. Store paint materials at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in well ventilated area, unless required otherwise by manufacturer's instructions.
- F. Take precautionary measures to prevent fire hazards and spontaneous combustion.

1.05 ENVIRONMENTAL REQUIREMENTS

- A. Provide continuous ventilation and heating facilities to maintain surface and ambient temperatures above 50 degrees F for twenty-four (24) hours before, during and forty-eight (48) hours after application

of finishes, unless required otherwise by manufacturer's instructions.

- B. Do not apply exterior coatings during rain or snow, or when relative humidity is above 50 percent, unless required otherwise by manufacturer's instructions.
- C. Minimum Application Temperatures for Latex Paint: 50 degrees F for exterior, unless required otherwise by manufacturer's instructions.
- D. Minimum Application Temperatures for Varnish Finishes: 65 degrees F for interior and exterior, unless required otherwise by manufacturer's instructions.
- E. Provide lighting level of 80 foot candles measured mid-height at substrate surface.

1.06 PROJECT CONDITIONS

- A. Apply water-base paints only when temperature of surfaces to be painted and surrounding ambient air temperatures are between 60 degrees F and 85 degrees F, for at least 72 hours prior to beginning of installation, unless otherwise permitted by paint manufacturer's printed instructions.
- B. Apply solvent-thinned paints only when temperature of surfaces to be painted and surrounding ambient air temperatures are between 45 degrees F and 95 degrees F, for at least 72 hours prior to beginning of installation, unless otherwise permitted by paint manufacturer's printed instructions.
- C. Maintain proper ambient air temperatures throughout entire timeframe of installation and cure period.
- D. Do not install until space is enclosed, weathertight, and ambient conditions are controlled and stabilized.
- E. Do not apply in snow, rain, fog or mist; or when relative humidity exceeds 85%; or on damp or wet surfaces.
- F. Provide adequate ventilation at all times for proper drying.

1.07 MAINTENANCE MATERIALS AND DATA

- A. See Specification Section 01 78 46 - Closeout Maintenance Materials.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Provide products, as approved by the Architect, from one of the following approved manufacturers:
 - 1. "The Sherwin-Williams Company" (S-W).
 - 2. "PPG Paints" (PPG).

2.02 MATERIALS

- A. Quality:
 - 1. Provide best quality grade of various types of coatings as regularly manufactured by acceptable paint materials manufacturers.
 - 2. Materials not displaying manufacturer's identification as a standard, "top-of-the-line" product will not be acceptable.
- B. Compatibility:
 - 1. Provide finish coats which are compatible with prime paints used.

2. Review other sections of these specifications in which prime paints or factory coats are to be provided to insure compatibility of total coatings systems for various substrates.
 3. Upon request from other trades, furnish information on characteristics of finish materials proposed for use, to insure compatible prime coats are used.
 4. Provide barrier coats over incompatible primers or remove and re-prime as required.
 5. Provide undercoat paint produced by same manufacturer as finish coats. Where undercoats specified are not considered by the paint manufacturer to be fully compatible with the finish coat, submit recommended undercoat substitution to Architect for acceptance. No additional cost to the Owner will be considered for such a change.
 6. Use only thinners approved by the paint manufacturer, and use only within recommended limits.
 7. Notify the Architect in writing of any anticipated problems during bidding with the use of specified coating systems with substrates primed by others.
- C. Coatings and Pigments:
1. To be pure, non-fading, applicable types to suit substrates and service expectations indicated.
 2. Ready mixed, except field catalyzed coating.
 3. Pigments processed to a soft paste consistency, capable of being readily and uniformly dispersed to as a homogeneous coating.
 4. Good flow and brushing properties; capable of drying or curing free of streaks or sags.
- D. Accessory Materials:
1. All materials, such as linseed oil, shellac, turpentine, paint thinners, and other materials not specifically indicated but required to achieve the finishes specified.
 2. All of commercial quality.

PART 3 - EXECUTION

3.01 INSPECTION

- A. Examine surfaces scheduled to be finished prior to commencement of work.
1. Report any conditions that may potentially affect proper application.
 2. Verify that surfaces and substrate conditions are ready to receive work as instructed by the product manufacturer.
 3. Do not proceed with work until unsatisfactory conditions have been corrected.
- B. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions otherwise detrimental to formation of a durable paint film or proper adhesion required.
- C. Beginning of installation equates to acceptance of the substrate by the contractor.

3.02 PREPARATION - GENERAL

- A. Perform preparation and cleaning procedures in accordance with paint manufacturer's instructions and as herein specified, for each particular substrate condition.
1. Clean surfaces to be painted before applying paint or surface treatments.
 2. Remove oil and grease prior to mechanical cleaning.
 3. Program cleaning and painting so that contaminants from cleaning process will not fall onto wet, newly painted surfaces.
- B. Provide all scaffolding and staging required for work in this Section.
1. Coordinate locations to eliminate interference with work of others.
- C. Remove hardware, hardware accessories, machined surfaces, electrical plates, lighting fixtures, trim, clocks, speakers, devices, fittings and similar items which are not to be finish-painted, prior to preparing

surfaces or finishing.

- D. Provide surface-applied protection prior to surface preparation and painting operations for all adjacent areas, surfaces, or items to remain.
- E. Correct minor defects and clean surfaces which affect work of this Section.
- F. Shellac and seal marks which may bleed through surface finishes.

3.03 MATERIALS PREPARATION

- A. Mix and prepare painting materials in accordance with manufacturer's directions.
- B. Store materials not in actual use in tightly covered containers. Maintain containers used in storage, mixing and application of paint in a clean condition, free of foreign materials and residue.

3.04 SURFACE PREPARTION

- A. Galvanized Surfaces:
 - 1. Remove surface contamination and oils and wash with non-petroleum based solvent.
 - 2. Apply coat of etching primer.
- B. Unit Masonry Surfaces:
 - 1. Remove dirt, loose mortar, scale, salt or alkali powder, and other foreign matter.
 - 2. Remove oil and grease with a solution of tri-sodium phosphate, rinse well and allow to dry.
 - 3. Remove stains caused by weathering of corroding metals with a solution of sodium metasilicate after thoroughly wetting with water.
 - 4. Allow to dry.
- C. Gypsum Board Surfaces:
 - 1. Latex fill minor defects.
- D. Previously Coated Surfaces:
 - 1. Maintenance painting will frequently not permit or require complete removal of all old coatings prior to repainting. However, all surface contamination such as oil, grease, loose paint, mill scale, dirt, foreign matter, rust, mold, mildew, mortar, efflorescence and sealers must be removed to assure sound bonding to the tightly adhering old paint.
 - 2. Feather edges of existing coating to make touch-up patches inconspicuous.
 - 3. Glossy surfaces of old paint films must be clean and dull before repainting. Accomplish by sanding or thoroughly washing with an abrasive cleanser.
 - 4. Spot prime any bare areas with an appropriate primer.
 - 5. Provide compatibility tests per submittal requirements herein.
 - 6. If the coating proves incompatible, complete removal is required.
- E. Hand Tool Cleaning:
 - 1. Hand tool cleaning removes all loose mill scale, loose rust, and other detrimental foreign matter. It is not intended that adherent mill scale, rust and paint be removed by this process.
 - 2. Mill scale, rust and paint are considered adherent if they cannot be removed by lifting with a dull putty knife.
 - 3. Prior to hand tool cleaning, remove visible oil, grease, soluble residues and salts by the methods outlined in the "Steel Structures Paint Council Surface Preparation Specification No. 2 (SSPC-SP1 and SSPC-SP2).

3.05 PROTECTION

- A. Protect elements surrounding the work of this Section from damage or disfiguration.

- B. Repair damage to other surfaces caused by work of this Section.
- C. Furnish drop cloths, shields, and protective methods to prevent spray or droppings from disfiguring other surfaces.
- D. Remove empty paint containers from site.

3.06 APPLICATION

A. General:

- 1. Apply paint and coatings in strict accordance with manufacturer's published directions. Apply all coatings at manufacturer's recommended spreading rates per coat to provide finished wet mil and dry mil coverage per coat between the minimum and maximum microns indicated.
- 2. Apply additional coats when undercoats, stains or other conditions show through final coat of paint, until paint film is of uniform finish, color and appearance. Give special attention to insure that surfaces, including edges, corners, crevices, welds and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.
- 3. Paint surfaces behind movable equipment same as similar exposed surfaces.
- 4. Paint back sides of access panels, and removable or hinged covers to match exposed surfaces.
- 5. Sand lightly between each succeeding enamel or varnish coat.
- 6. Omit first coat (primer) on metal surfaces which have been shop-primed and touch-up painted, unless otherwise indicated.

B. Scheduling Painting:

- 1. Apply first-coat material to surfaces that have been cleaned, pretreated or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.
- 2. Allow sufficient time between successive coatings to permit proper drying.
- 3. Do not apply finishes to surfaces that are not dry.

C. Technique:

- 1. Apply each coat to uniform finish.
- 2. Apply each coat of paint slightly darker than preceding coat, unless otherwise approved.
- 3. Sand lightly between coats to achieve required finish.
- 4. Allow applied coat to dry before next coat is applied.

D. Apply paint as recommended by the manufacturer and as approved by the Architect:

- 1. Apply final coat to concrete, masonry and smooth finished wall and ceiling surfaces with roller.
- 2. Apply paint to exposed ceiling surfaces and in inaccessible areas by spraying.
- 3. Do not use spray application on other areas without written approval of Architect.
- 4. Apply materials at not less than manufacturer's recommended spreading rate, to establish a total dry film thickness as indicated or if not indicated, as recommended by coating manufacturer.

E. Draw lines of demarcation between different shades or colors to eliminate blurred edges.

F. Mechanical and Electrical Work:

- 1. Painting of mechanical and electrical work is limited to those items exposed in finished occupied spaces.
- 2. Mechanical items to be painted include, but are not limited to, ducts, diffusers, piping, pipe hangers, supports and accessory items.
- 3. Electrical items to be painted include, but are not limited to, the following:
 - a. Conduit and fittings (In finished areas only, unless otherwise indicated).

b. Switchgear (In Finished areas only, unless otherwise indicated).

G. Prime Coats:

1. Apply prime coat of material which is required to be painted or finished, and which has not been prime coated by others.
2. Re-coat primed and sealed surfaces where there is evidence of suction spots or unsealed areas in first coat, to assure a finish coat with no burn-through or other defects due to insufficient sealing.

H. Pigmented (Opaque) Finishes:

1. Completely cover to provide an opaque, smooth surface of uniform finish, color, appearance and coverage.
2. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness or other surface imperfections will not be acceptable.

I. Completed Work:

1. Match approved samples for color, texture and coverage.
2. Remove, refinish or repaint work not in compliance with specified requirements.

J. Renovation and Patching Areas:

1. Prepare and prime new construction portions of surfaces per specifications.
2. Prepare existing surfaces located in the same plane as renovation or patching per specifications.
3. Paint area of renovation and patching entire surface full height, from "floor-to-ceiling" and from "corner-to-corner".

3.07 FINISHING MECHANICAL AND ELECTRICAL EQUIPMENT

- A. Paint shop primed equipment.
- B. Touch up marred or damaged shop prefinished items.
- C. Remove unfinished louvers, grilles, covers and access panels on mechanical and electrical components and paint separately.
- D. Replace identification markings on mechanical or electrical equipment when painted accidentally.
- E. Paint exposed conduit and electrical equipment occurring in finished areas.
- F. Reinstall electrical plates, hardware, light fixture trim, clocks, speakers and fittings removed prior to finishing.
- G. Refer to Division 23 and Division 26 for schedule of color coding and identification banding of equipment, ductwork, piping and conduit.

3.08 CLEANING AND PROTECTION

- A. As work proceeds, promptly remove paint where spilled, splashed or spattered.
- B. During progress of work maintain premises free of unnecessary accumulation of tools, equipment, surplus material and debris.
- C. Collect cotton waste, cloths and material which may constitute a fire hazard, place in closed metal containers and remove daily from site.
- D. During progress of work remove from site discarded paint materials, rubbish, cans and rags at end of

each work day. **DISPOSE OF ALL MATERIALS IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.**

- E. Upon completion of painting work, clean window glass and other paint-spattered surfaces.
- F. Protection:
 - 1. Protect work of other trades, whether to be painted or not, against damage by painting and finishing work. Correct any damage by cleaning, repairing or replacing, and repainting.
 - 2. Provide "Wet Paint" signs as required to protect newly-painted finishes. Remove temporary protective wrappings provided by others for protection of their work, after completion of painting operations.
 - 3. At the completion of work of other trades, touch-up and restore all damaged or defaced painted surfaces.

3.09 **PAINT SYSTEM SCHEDULE - INTERIOR PAINT SYSTEMS**

- A. **CONCRETE MASONRY UNITS** (interior, existing and/or previously painted, epoxy coating):
 - 1st Coat - Acrylic Block Filler
"S-W, Heavy-Duty Block Filler, Interior/Exterior Acrylic, B42W46"
*Painter responsible to visit site and field verify surface prep required.
*Additional coats as required to cover existing color and texture.
 - 2nd Coat - Pre-Catalyzed Waterbased Epoxy
"S-W, Pro-Industrial Pre-Catalyzed Water Based Epoxy"
K45 Series
 - 3rd Coat - Pre-Catalyzed Waterbased Epoxy
"S-W, Pro-Industrial Pre-Catalyzed Water Based Epoxy"
K45 Series
- B. **STEEL, ALL TYPES** (interior, existing and/or previously painted, painted finish):
 - 1st Coat - Rust-Inhibitive Metal Primer
"S-W, Kem Bond HS, Universal Metal Primer"
*Color selected as most appropriate beneath finish topcoats.
*Additional coats as required to cover existing color or correct rusting.
*Painter responsible to visit site and field verify surface prep required.
 - 2nd Coat - Urethane Alkyd Topcoat
"S-W, Industrial Urethane Alkyd Enamel, B54-150 Series, Gloss"
 - 3rd Coat - Urethane Alkyd Topcoat
"S-W, Industrial Urethane Alkyd Enamel, B54-150 Series, Gloss"
*Not less than 3.0 mils dry film thickness.
- C. **GYPSUM DRYWALL / PLASTER WALL SURFACES** (interior, existing and/or previously painted, epoxy coating):
 - 1st Coat - Latex Primer

"S-W, ProMar 200 Zero VOC, Interior Latex Primer, B28W02600"

*Painter responsible to visit site and field verify surface prep required.

*Additional coats as required to cover existing color and texture.

2nd Coat - Pre-Catalyzed Waterbased Epoxy
"S-W, Pro-Industrial Pre-Catalyzed Water Based Epoxy"
K45 Series

3rd Coat - Pre-Catalyzed Waterbased Epoxy
"S-W, Pro-Industrial Pre-Catalyzed Water Based Epoxy"
K45 Series

SUBMITTAL CHECKLIST

1. Product Data.
2. Samples and Draw Downs.
3. Mock-Ups.
4. Compatibility Tests.

END OF SECTION 09 90 00

SECTION 12 32 13 - WOOD CABINETS AND CASEWORK

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnish and install all pre-finished, pre-fabricated, wood, cabinets and casework as shown on the Drawings and specified herein, including delivery to the site, storing, unpacking, setting in place, leveling, anchoring to walls and floors, and all other required activities need for a complete installation.
- B. Wood casework is indicated on the Equipment Drawings.
- C. Color/finish selections for wood casework/countertops are indicated on the Interior Drawings.
- D. Equipment items for wood casework are indicated on the Equipment Drawings.
- E. Epoxy resin countertops as indicated on Drawings atop wood casework.
- F. Solid surface countertops as indicated on the Drawings atop wood casework.
- G. Wood stained, chemical resistant casework finish intended for use in science and laboratories spaces.

1.02 QUALIFICATIONS

- A. Supplier's Qualifications:
 - 1. Manufacturers of Wood Cabinets and Casework should be pre-qualified prior to bidding.
 - 2. Shop of manufacturer should be certified by the Architectural Woodwork Standards (AWS), and be capable of providing proof of such certification upon request.
 - 3. Manufacturers wishing to be included on the pre-qualified list herein shall submit qualifications in writing to the Architect no later than ten (10) days prior to the bid.
 - 4. Should be knowledgeable of the latest practices of the Scientific Equipment and Furniture Association (SEFA).
- B. Pre-qualified Manufacturers of Wood Cabinets and Casework:
 - 1. Campbell-Rhea.
 - 2. Collegedale.
 - 3. Diversified Woodcrafts, Inc.
 - 4. Kewaunee Scientific Corporation.
 - 5. Leonard Peterson Company.
 - 6. Stevens Advantage Laboratory.

1.03 QUALITY ASSURANCE

- A. Comply with the latest edition of the Architectural Woodwork Standards (AWS) "Quality Standards". References to Premium, Custom, or Economy in this specification are to be as defined in this publication.
- B. Provide items and work with a minimum of Custom Grade, with true balanced construction.
- C. Provide items and installation of straight, flat, level, plumb, and true quality and craftsmanship. Items provided that create an installation not acceptable for these reasons, or otherwise deemed unacceptable for purposes of aesthetics or maintenance, shall be removed and replaced by the Contractor without additional costs to the Owner. Final determination shall be made by the Architect.
- D. Any inconsistencies or irregularities in the surface or product will be cause for rejection. All rejected products shall be removed and replaced with new at no additional cost to the Owner. The evaluation of acceptance and rejection is at the sole discretion of the Architect.
- E. Follow latest practices and requirements of the Scientific Equipment and Furniture Association (SEFA).

1.04 SUBMITTALS

- A. Samples:
 - 1. Complete range of manufacturer's standard finishes where colors are not specified.
 - 2. Samples of specified items only, where colors have been indicated.
 - 3. Samples of each type, material, and color of countertop specified.
- B. Shop Drawings:
 - 1. Field measurements shall be taken to verify that cabinets and casework will fit into designed space. Entryways, corridors, and door openings shall be verified to ensure that the equipment be manufactured in a manner to permit it to be moved through properly into place.
 - 2. Show layout of cabinets with product reference numbers, details of construction, dimensions, elevations, rough-ins, materials, finishes, hardware, and accessories.
 - 3. Reference Architect's nomenclature of product identification as indicated on the Drawings.
 - 4. Certification of chemical finish, with indication of resistance to various chemicals.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Protect casework during transit, delivery, storage, and handling to prevent damage, soiling, and deterioration.
- B. Do not deliver casework until painting, wet work, grinding, and similar operations which could damage, soil, or deteriorate casework have been completed in installation areas.
- C. Deliver casework as needed for immediate installation whenever possible. Casework delivered ahead of time for installation shall be stored by Contractor until project areas are ready for installation.

1.06 WARRANTY

- A. Provide manufacturer's standard warranty.
- B. The wood cabinets and casework is warranted to be free from manufacturing defects for a period of three (3) years.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Hardwoods and face veneers for exposed surfaces shall be:
 - 1. Red Oak, plain sliced. As selected by Architect for color and grain.
 - 2. Stain color as selected by Architect from manufacturer's entire selection.
 - 3. Grain direction to be Vertical Grain Match, all surfaces.
 - 4. Interiors of open cases are considered exposed surfaces.
- B. Solid woods shall be properly air-dried, kilned to 5% - 6% moisture content and then tempered in inside storage to a moisture content of 6% - 7%. Woods used in interior, unexposed construction may be maple, birch, or other suitable hardwoods, clear and sound.
- C. Lumber core shall be balanced construction consisting of a solid hardwood stave core, hardwood cross plies and face veneers. Lumber core for doors shall additionally include an internal end band. Lumber core shall conform to ANSI/HPVA HP-1 2000 Product Standards.

- D. Plywoods shall be balanced veneer core construction glued with water resistant resin adhesives. Hardwood plywoods for exposed surfaces may have face veneers and shall conform to ANSI/HPVA HP-1 2000 product standards. Plywood for interior and unexposed surfaces may be hardwood plywoods or softwood plywoods conforming to U.S. Department of Commerce and Voluntary Product Standard PS-1.
- E. Colors:
 - 1. Colors as selected from manufacturer's entire selection, no limit on number of colors selected.
 - 2. If colors are indicated on the Drawings, colors and patterns must be matched.
 - 3. For purposes of color selections, countertops shall include all splashes, aprons, supports and cleats where no base units are provided, unless noted otherwise.
 - 4. For purposes of color selections, all fillers and panels shall match adjacent exposed cabinet faces.

2.02 COUNTERTOPS

- A. Epoxy Resin Countertops:
 - 1. Acceptable Manufacturers and Products:
 - a. "Collegedale", Perma Resin.
 - b. "Prime Industries", Epoxy Resin.
 - c. "Laboratory Tops, Inc.", Epoxy Resin Worksurfaces.
 - d. "Durcon, Inc.", Epoxy Resin Worksurfaces.
 - 2. Lab grade resin tops shall be molded from modified epoxy resins and inert fillers that have been compounded and completely cured in processing to give optimum physical and chemical resistance properties required of a heavy duty laboratory table top. Tops and curbs shall be homogenous mixture throughout the full thickness and shall not depend upon a surface coating that may be removed by chemical and/or physical abuse.
 - 3. Thickness: 3/4" or 1" actual. Drawings based on 1" material. Adjust all dimensions if 3/4" used.
 - 4. Color: Black, non-glaring medium sheen.
 - 5. All tops shall be supplied in the largest practicable sizes and field joined using waterproof and chemical resistant epoxy base cements. Locations of seams shall be such that they are equally or evenly divided across the countertop surface. No seams shall be located at a sink or device.
 - 6. Countertops shall have a drip groove set back 3/8" on the underside of exposed edges.
 - 7. Countertops shall be truly flat, and be free of dips, sways and imperfections in the surface. Surfaces shall be 100% flat in relationship to one another at all seam locations.
 - 8. Determination of flatness and trueness may be evaluated for performance and aesthetics. Architect shall have sole and final determination as to acceptability of flatness and trueness.
- B. Solid Surface Material:
 - 1. Acceptable Manufacturers and Products:
 - a. "Dupont", "Corian".
 - b. "Wilsonart", "Gibraltar".
 - c. "Formica", "Formica Solid Surfacing".
 - d. "Meganite", "Meganite".
 - e. "Avonite Surfaces", "Avonite".
 - f. "LG Hausys", "Acrylic Solid Surface".
 - g. "Hanwha L&C", "Hanex Solid Surface".
 - 2. 1/2" thick for countertops, installed over particleboard backer, for total thickness of 1" minimum.
 - 3. 1/2" thick for edge banding, built-up to provide a face depth of 1", unless indicated otherwise.
 - 4. 1/2" thick for backsplashes and end splashes, 4" high unless otherwise noted.

2.03 CONSTRUCTION

- A. Base, Wall, and Tall Units:
 - 1. Integrally constructed to provide a fully enclosed unit designed to ensure a dust and vermin free

- interior.
 - 2. Shall be designed with solid ends and backs and fully enclosed toe space.
 - 3. Shall be designed with full flush-overlay doors and drawers comprised of a particleboard core, vertically matched grain hardwood veneer of the selected species, 3mm lumber edgeband, 3/4" thickness. Provide a continuous astragal strip between double swinging doors.
 - 4. End and bottom panels shall be 3/4" plywood with front exposed edges of panels faced with solid hardwood.
 - 5. Backs shall be 1/4" tempered welded fiber, grooved into end panels.
Where access to services is required, backs shall be removable.
 - 6. Bottoms shall be 3/4" plywood with exposed edge faced with solid hardwood providing a flush interior for ease of cleaning.
 - 7. All toe spaces shall be 2-1/2" deep and 4-1/4" high, fully enclosed, and an integral part of the case.
 - 8. Top panel of tall units and top and bottom panels of wall units shall be 1" plywood with exposed front edge faced with solid hardwood.
- B. Shelving:
- 1. Fully adjustable, typically.
 - 2. Fixed where required for unit stability and/or positive door latching.
 - 3. 1" thick 36" wide or greater, 3/4" thick less than 36" wide.
 - 4. Shelf edge banding on both front and rear edges, typical.
Shelf edge banding on all four edges where shelves roll out or otherwise expose the side edges.
- C. Panel Doors:
- Shall be solid core construction consisting of a hardwood banded core, 1/16" poplar cross-ply poplar cross-plys and select hardwood veneer faces. Doors shall be 3/4" thick except hinged doors over 48" in height which shall be 1" thick. All doors shall be radiused lip on edges of swinging doors. Double swinging doors shall meet with an astragal being formed by way of the right hand door overlapping an inset lip on the left hand door. Hinged doors shall have two hinges per door for doors to 42" high and three hinges per door over 42" high.
- D. Drawers:
- Shall have fronts 3/4" thick of solid five-ply hardwood lumber core construction laminated with select hardwood veneer faces with radius lip to match doors. Drawer box members shall be 1/2" laminated hardwood with dovetail construction. All joints shall be glued. Bottom of drawers shall be 1/4" tempered welded fiber, grooved into front, sides and back of drawer. Drawer bottoms shall be further secured with hot glue flowed into the bottom retention groove from the underside thus forming a rigid and unitized drawer box.
- E. Joinery:
- 1. Handwrap fluted dowel construction.
 - 2. 8mm minimum.
 - 3. Doweled and glued.

2.04 HARDWARE

- A. Hinges:
- 1. Five knuckle, 270 degree, Institutional Grade 1 hinge.
 - 2. Constructed of .090" minimum thickness steel.
 - 3. Hospital tipped with non-removable pin.
 - 4. 2-1/2" chrome, satin finish.
 - 5. Mounted to door and case with not less than three screws per wing.
 - 6. Concealed or with off-set wrap around wings, as selected by the Architect.
 - 7. Lifetime guarantee as warranted by the hardware manufacturer.

- B. Drawer Slides:
 - 1. Standard full extension telescoping drawer slide; 3/4 extension slides are not acceptable.
 - 2. Self-closing epoxy coated steel drawer slide with smooth, quiet operation and lateral stability.
 - 3. 100 lb. static load rating, minimum. 150 lb. static load rating, minimum at all file drawers.
 - 4. Lifetime guarantee as warranted by the hardware manufacturer.
- C. Drawer Stops:
 - 1. Shall be provided on all drawers to prevent inadvertent removal.
 - 2. Shall be automatic type, zinc plated steel.
- D. Pulls For Drawers and Doors:
 - 1. 4" solid metal bent wire pull.
 - 2. Shall be of clean, modern design offering a comfortable hand grip and shall attach through drawer or door with machine screws on each end of pull.
 - 3. Extruded aluminum with satin lacquer finish.
 - 4. Install horizontally, centered on all drawer fronts. Install vertically on all doors.
- E. Adjustable Shelf Supports:
 - 1. Metal single pin type shelf support.
 - 2. Shall friction fit into cabinet end panels and vertical dividers and be adjustable on a 32mm center precision drilled line bore pattern.
 - 3. Shall have integral 5mm diameter support pin to interface pre-drilled holes, and to prevent accidental rotation of support.
 - 4. 250 lb. minimum static load rating per support without failure.
 - 5. Shelves longer than 47" shall have additional support standard and brace at center span.
- F. Door and Drawer Locks:
 - 1. Locks shall be furnished on all doors and drawers throughout, unless indicated otherwise.
 - 2. Standard dead bolt, cylinder type, die cast lock with a 5-disc tumbler mechanism, back mounted molded plastic clad housing and removable core.
 - 3. Nickel plated removable lock core available with up to 250 key types.
 - 4. Locks used for double door applications shall be capable of securing both doors simultaneously without the need for additional elbow or deadbolt catches or bolt on the passive door.
 - 5. Furnished with two keys per lock. Master key as required.
 - 6. Unless otherwise specified, key casework per the following requirements:
 - a. Key all locks alike per room with each room keyed differently.
 - b. Each room shall be master keyed differently from all other rooms.
 - c. Provide grandmaster key to operate all locks of all master keys of all spaces.
- G. Door Catches:
 - 1. Heavy duty magnetic type catch.
 - 2. Shall have matching white plastic coated housing and dual floating magnet poles.
 - 3. Holding strength of 5kg.
 - 4. Doors less than 48" in height shall have 1 magnetic catch mounted at either the top or bottom of each door.
 - 5. Doors over 48 inches in height shall have 1 magnetic catch mounted at both the top and bottom of each door.
 - 6. Doors shall receive a matching steel strike plate attached with threaded fasteners.
- H. Tall Case Latching Assembly:

1. Provide at all tall case double swinging doors.
 2. Shall consist of an eccentric plate operating two 1/8" x 5/8" plated vertically operating locking bars.
 3. Each bar shall operate through an extruded nylon guide and, when locked, shall engage a strike plate providing positive latching for the left hand door.
 4. The lock attached to the right hand door shall operate a bolt which, when locked, shall overlap the left hand door providing secure locking.
 5. Single doors shall be locked to case sides.
- I. Silencers:
1. Cork, plastic, or rubber type silencers.
 2. Provide on all drawers and doors.
- J. Chain Stops:
1. Shall be provided at the top of all doors to all tall cabinets.
 2. Provide chain stops at the top of all doors to all base and wall cabinets that open directly into a wall surface or obstruction.
 3. Finish of chains and stops to match hinges.

2.05 WOOD STAINED, CHEMICAL RESISTANT CASEWORK FINISH

- A. All exteriors and exposed surfaces to receive finish shall be free of machine marks, carefully and smoothly sanded in preparation for finishing.
- B. Exteriors, inside surfaces of doors, cupboard interiors and shelves shall then be stained, followed by resinous sealer, dried properly and carefully sanded. Two coats of chemical resistant catalyzed synthetic alkyd-urea resin varnish shall be applied and thoroughly dried, resulting in a smooth semi gloss finish.
- C. Drawer boxes shall receive the same finish except that the stain may be omitted.
- D. Bottoms, unexposed backs and ends shall be sealed with pigmented resinous sealer. Tops frames, interior of drawer openings and toe eases shall be sealed with clear sealer.
- E. Stain finish shall be selected from manufacturer's entire selection.

2.06 EPOXY RESIN SINKS AND DRAIN TROUGHS

- A. Material:
1. Acceptable Manufacturers and Products:
 - a. "Collegedale", Perma Resin.
 - b. "Prime Industries", Epoxy Resin.
 - c. "Laboratory Tops, Inc.", Epoxy Resin Worksurfaces.
 2. Color: Black, non-glaring medium sheen.
- B. Construction:
1. Shall be molded from modified epoxy resins and inert fillers that have been compounded and completely cured in processing to give optimum physical and chemical resistance properties required of a heavy duty laboratory product. Shall be homogenous mixture throughout and shall not depend upon a surface coating that may be removed by chemical and/or physical abuse.
 2. Coved corners and bottom dished at least 1 degree toward outlet to assure complete drainage.
 3. High resistance to physical and thermal shock.

PART 3 - EXECUTION

3.01 INSPECTION

- A. Assure adequate anchorage, grounds, blocking, nailers, and supports.
- B. Casework Contractor to coordinate with General Contractor and all associated trades.
- C. Assure all items are ready for plumbing, mechanical, and electrical connections by others.

3.02 INSTALLATION

- A. Install casework plumb with top level.
- B. Anchor cabinets to floors and walls.
- C. Install fillers, trim, sinks and accessories required for complete installation.
- D. Touch up all marred surfaces to match original.

SUBMITTAL CHECK LIST

- 1. Samples of finishes.
- 2. Shop Drawings.
- 3. Samples of countertops.
- 4. Certification of chemical finish.

END OF SECTION 12 32 13

SECTION 22 05 00 - BASIC MECHANICAL REQUIREMENTS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Basic Mechanical Requirements specifically applicable to Division 22 Sections.
- B. Refer to Division 1 and Conditions of the Contract for additional requirements that apply to work of Division 22.
- C. Coordination required for submittals of mechanical and equipment utility incentives and rebates.

1.02 REGULATORY REQUIREMENTS

- A. All work shall be executed and inspected in accordance with all local or state codes, laws, ordinances, rules and regulations applicable to the particular class of work.
- B. If the Contractor discovers the drawings or specifications are in conflict with the above mentioned laws, rules and regulations, he shall promptly notify the Architect in writing so any necessary changes can be accomplished. If the Contractor performs any work without notice as required above, he will bear the costs for corrective action.
- C. The Contractor is responsible for all applicable service charges, fees, permits royalties and the like.
- D. Mechanical work shall include complete, code-complying, fully operating and functional systems.

1.03 PROJECT/SITE CONDITIONS

- A. The drawings indicate required size and points of termination for pipes and ducts, and suggest proper routes of pipe to conform to structure, avoid obstructions and preserve clearances. However, it is not intended that these drawings indicate all necessary offsets and it is the Contractor's responsibility to install piping and ducts in such a manner required to conform to structure, avoid obstructions, preserve headroom and keep openings and passageways clear without further instruction from Architect/Engineer or cost to the Owner.
- B. Contractor is responsible for co-ordinating installation and providing offsets as required for a complete and finished installation. Do not make-up duct work or piping runs until all existing conditions have been examined, work of other trades coordinated and a field coordinated layout determined.
Notify Architect/Engineer of potential conflicts before making up ductwork or piping.
- C. For purposes of clearness and legibility, drawings are essentially diagrammatic, and although size and location of equipment are drawn to scale wherever possible, the Contractor shall make use of all data in all of the contract documents and shall verify this information at building site.

1.04 CUTTING AND PATCHING

- A. Cut existing walls, floors, ceilings, roofs, etc. necessary for the proper installation of new materials, equipment and related mechanical items. Provide all necessary framing, lintels, hangers, etc. to maintain the structural integrity of the building system after cutting.
- B. Contractor is responsible for cost to restore or patch adjacent surfaces to original condition. Employ proper professional trade for patching and finishing exposed surfaces.

END OF SECTION 22 05 00

SECTION 22 07 00 - PIPING INSULATION

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Piping Insulation.

1.02 REFERENCES

- A. ANSI/ASTM C195 - Mineral Fiber Thermal Insulation Cement.
- B. ANSI/ASTM C547 - Mineral Fiber Performed Pipe Insulation.
- C. ANSI/ASTM C552 - Cellular Glass Block and Pipe Thermal Insulation.
- D. ASTM C449 - Mineral Fiber Hydraulic - setting Thermal Insulating and Finishing Cement.
- E. ASTM E84 - Surface Burning Characteristics of Building Materials.

1.03 QUALITY ASSURANCE

- A. Applicator:
Company specializing in piping insulation application.
- B. Materials:
Flame spread/fuel contributed/smoke developed rating of 25/50/50 in accordance with ASTM E84.

1.04 SUBMITTALS

- A. Submit product data including thermal conductivity and standards compliance.
- B. Include product description, list of materials and thickness for each service, and locations.
- C. Submit manufacturer's installation instructions.

PART 2 - PRODUCTS

2.01 INSULATION

- A. Provide products, as approved by the Architect, from one of the following acceptable manufacturers:
 - 1. Knauf
 - 2. Certainteed
 - 3. Pittsburg Corning
 - 4. Manville
 - 5. Owens/Corning
- B. Type A:
 - 1. Glass Fiber Insulation.
 - 2. ANSI/ASTM C547; "K" value of 0.24 at 75°F; noncombustible.
 - 3. Fittings insulation shall be 25/50 pre-fittings with fiberglass inserts.

2.02 JACKETS

- A. Interior Applications:
 - 1. Vapor Barrier Jackets: Kraft reinforced foil vapor barrier with self-sealing adhesive joints.

2.03 ACCESSORIES

- A. Insulation Bands: 3/4 inch wide; 0.015 inch thick galvanized steel.
- B. Adhesives: Compatible with insulation.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Install materials after piping has been tested and approved.

3.02 INSTALLATION

- A. Install materials in accordance with manufacturer's instructions.
- B. Continue insulation with vapor barrier through penetrations.
- C. In exposed piping, locate insulation and cover seams in least visible locations.
- D. On insulated piping with vapor barrier, insulate fittings, valves, unions, flanges, strainers, flexible connections, and expansion joints.
- E. On insulated piping without vapor barrier and piping conveying fluids 140°F or less, do not insulate flanges and unions at equipment, but bevel and seal ends of insulation at such locations.
- F. Provide an insert, not less than 6 inch long, of same thickness and contour as adjoining insulation, between support shield and piping, but under the finish jacket, on piping 2 inch diameter or larger, to prevent insulation from sagging at support points. Inserts shall be cork or other heavy density insulating material suitable for the planned temperature range. Factory fabrication inserts may be used.
- G. Neatly finish insulation at supports, protrusions, and interruptions.
- H. Jackets:
 - 1. Indoor, Concealed Applications: Insulated pipes conveying fluids above ambient temperature shall have standard jackets, with or without vapor barrier, factory-applied or field applied. Insulate fittings, joints, and valves with insulation of like material and thickness as adjoining pipe, and finish with glass cloth and adhesive. PVC jackets may be used.

3.03 SCHEDULE

<u>PIPING</u>	<u>TYPE</u>	<u>PIPE SIZE</u>	<u>THICKNESS*</u>
Domestic Hot Water	A	2 inches	1/2 inch
Domestic Cold Water	A	<2 inches	1/2 inch

END OF SECTION 22 07 00

SECTION 22 10 00 - PLUMBING PIPING INSIDE BUILDING

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnish labor, materials, equipment, special tools, supervision and services required to complete the following work indicated, noted and detailed on drawings and specified herein:
 - 1. Pipe and pipe fittings.
 - 2. Valves.
 - 3. Sanitary sewer drain, waste and vent piping system.
 - 4. Domestic water piping system.
 - 5. Compressed air piping system.

1.02 REFERENCES

- A. ASTM B88 - Seamless Copper Water Tube.
- B. ASTM B306 - Copper Drainage Tube (DWV).
- C. ASTM D1785 - PVC Plastic Pipe, schedule 40, 80 and 120.
- D. ASTM D2665 - PVC Plastic Drain, Waste and Vent Pipe and Fittings.

1.03 QUALITY ASSURANCE

- A. Valves: Manufacturer's name and pressure rating marked on valve body.

1.04 SUBMITTALS

- A. Submit product data.
- B. Include data on pipe materials, pipe fittings, valves and accessories.

PART 2 - PRODUCTS

2.01 SANITARY SEWER DRAIN, WASTE AND VENT PIPING

- A. PVC Schedule 40.
- B. Fittings: PVC Schedule 40, designed for solvent welded connections.

2.02 DOMESTIC WATER PIPING

- A. Above Grade:
 - 1. Type "L" hard temper copper tubing.
 - a. Wrought copper solder fittings or mechanically formed Tee connections above grade for pipe sizes up to and including 4".
 - b. Solder with Sil-Fos or approved equal.
- B. Valves:
 - 1. Shut-off service shall be gate or ball type.
 - 2. Flow check service shall be swing check type.
 - 3. Pressure Rating: 160 psi minimum.

2.03 COMPRESSED AIR PIPING

- A. Galvanized Steel Pipe.
- B. Fittings: Galvanized Steel, designed for threaded joints and connections.
- C. Match wall thickness and piping weight to working pressure of system.
If not known or otherwise indicated, provide Schedule 80 (XS) piping, minimum.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Provide non-conducting dielectric connections wherever jointing dissimilar metals.
- B. Route piping in orderly manner and maintain gradient.
- C. Install piping to conserve building space and not interfere with use of space.
- D. Group piping whenever practical at common elevations.
- E. Install piping to allow for expansion and contraction without stressing pipe, joints or connected equipment.
- F. Provide clearance for installation of insulation and access to valves and fittings.
- G. Slope water piping and arrange to drain at low points.
- H. Prepare pipe, fittings, supports and accessories not prefinished, ready for finish painting. Refer to Section 09 90 00.
- I. Establish invert elevations, slopes for drainage 1/8 inch per foot.
- J. Install valves with stems upright or horizontal, not inverted.
- K. No double-wye fittings will be permitted. Where the fixture/branch sanitary piping connects to the sanitary main, single wye fittings are to be used.
- L. Short 1/4 turn radius on sanitary piping elbows is prohibited.
- M. Where sanitary piping makes a change in direction, two 45-degree fittings or a "medium sweep" shall be used.

3.02 APPLICATION

- A. Install unions downstream of valves and at equipment or apparatus connections.
- B. Install brass male adapters each side of valves in copper piped system. Sweat solder adapters to pipe.
- C. Install ball valves for shut-off and to isolate equipment, part of systems, or vertical risers. Install at all plumbing fixture drops, or group of fixtures drop, above ceiling and with water hammer arrestors at the high point.

3.03 DISINFECTION OF DOMESTIC WATER PIPING SYSTEM

- A. Prior to starting work, verify system is complete, flushed and clean.
- B. Sterilization shall be performed in accordance with State Board of Health Rules and Regulations.
- C. Provide Certification from Board of Health after sterilization.

SUBMITTAL CHECK LIST

- 1. Product Literature

END OF SECTION 22 10 00

SECTION 22 40 00 - PLUMBING FIXTURES

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnish labor, materials, equipment, special tools, supervision and services required to complete the following work indicated, noted and detailed on drawings and specified herein:
 - 1. Faucets.

1.02 SUBMITTALS

- A. Submit product data.
- B. Include trim and finishes.

1.03 OPERATIONAL AND MAINTENANCE DATA

- A. Submit operation and maintenance data.
- B. Include fixture trim exploded view and replacement parts lists.

1.04 WARRANTY

- A. Provide one year manufacturer's warranty.

PART 2 - PRODUCTS

2.01 PLUMBING FIXTURES

- A. Manufacturer's model numbers are shown on plans to establish a standard of quality only. Other acceptable manufacturer's fixtures may be substituted, as approved by the Architect.
- B. See Section 01630 - Product Options and Substitutions for all requirements.

2.02 ACCEPTABLE MANUFACTURERS

- A. Faucets:
 - 1. "Delta"
 - 2. "American Standard"
 - 3. "Kohler"
 - 4. "Zurn"
 - 5. "Chicago Faucet"
 - 6. "T&S Brass"

PART 3 - EXECUTION

3.01 INSPECTION

- A. Review millwork shop drawings. Confirm location and size of fixtures and openings before rough-in and installation.
- B. Verify adjacent construction is ready to receive rough-in work of this Section.

3.02 INSTALLATION

- A. Install each fixture with trap, easily removable for servicing and cleaning.
- B. Provide chrome plated rigid supplies to fixtures with screwdriver stops, reducers, and escutcheons.

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KHASPEC 22 40 00

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C. Install components level and plumb.

3.03 ADJUSTING AND CLEANING

A. Adjust stops or valves for intended water flow rate to fixtures without splashing, noise or overflow.

SUBMITTAL CHECK LIST

1. Product Literature

END OF SECTION 22 40 00

SECTION 23 21 00 - HYDRONIC PIPING DEMOLITION

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Removal of existing abandon heating water piping and fin tube radiation

PART 2 - PRODUCTS

Not Applicable

PART 3 - EXECUTION

3.01 PREPARATION

- A. Examine piping in areas scheduled for removal
- B. Determine line is inactive and no longer needed.
- C. Drain all fluids from existing piping

3.02 DEMOLITION

- A. Remove fin tube enclosure (if applicable), fin tube section and supply/return piping.
- B. Cap all piping at wall in a manner that will not interfere with new cabinetry installation.

END OF SECTION 23 21 00

SECTION 26 01 00.01 - SUMMARY OF ELECTRICAL WORK

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnish and install a complete electrical system, as specified and shown on drawings.
- B. Provide all items, articles, materials, operations or methods listed, mentioned or scheduled on the drawings and/or herein, including all labor, materials, equipment and incidentals necessary and required for their completion.
- C. All work shall be installed as per drawings, specifications and electrical code. Where one contradicts the other the greater shall be used.
- D. Coordination required for submittals of electrical and lighting utility incentives and rebates.

PART 2 - PRODUCTS

2.01 GENERAL

- A. All materials shall be new and bear the manufacturer's name, trade name and UL label in every case where a standard has been established for the particular material. The materials to be furnished under each section of the specifications shall be the manufacturer's latest approved design.
- B. Materials shall be delivered to the site and stored in original containers and be readily accessible for inspection by the Architect/Engineer until installed.
- C. Materials of the same general type shall be of the same make throughout the project to provide a uniform appearance, operation and maintenance.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. All work performed under this section must be done by workmen skilled in their respective trades. All work must present an appearance typical of the best trade practices. Any work not installed in this manner shall be repaired, removed and replaced or otherwise remedied as directed by the Architect/Engineer.
- B. Manufacturer's direction shall be followed completely in the delivery, storage, protection and installation of all equipment and materials. The Contractor shall promptly notify the Architect/Engineer, in writing, of any conflict between any requirement of the Contract Documents and the manufacturer's directions or such written instructions from the Architect/Engineer, before proceeding with the work.
- C. All work and equipment installed under Division 26 work shall be supported, plumbed, rigid and true to line. All Architectural, Structural, Mechanical, Electrical and Fire Protection drawings, shop drawings and catalog data, shall be studied thoroughly, to determine how equipment, fixtures and conduit, etc., are to be supported, mounted or suspended, and shall provide extra steel bolts, inserts, brackets and accessories for proper support whether or not show on the drawings. When directed, drawings shall be submitted showing supports for approval.

3.02 MISCELLANEOUS STEEL

- A. Provide all necessary miscellaneous steel angles, channels, rods, etc., for hanging, mounting or suspending equipment, fixtures, devices, etc., installed under Division 26 work.
- B. Supports installed under Division 26 work shall be suitably fastened to building structural members in a manner approved by Architect/Engineer

3.03 SPECIAL SEALS

- A. After conduits and tubing are installed, the spaces around conduits shall be sealed.
- B. Sealing of all spaces created for the electrical systems shall be in accordance with the requirements of the fire inspector and governing codes.

END OF SECTION 26 01 00.01

SECTION 26 01 00.02 - ELECTRICAL COORDINATION

PART 1 - GENERAL

1.01 COORDINATION

- A. The Contractor is responsible for the proper coordination of the work specified herein.
- B. Any apparatus, appliance, material or work not shown on the drawings, but mentioned in the specifications or vice versa, or any incidental accessories necessary to make the work complete in all respects and ready for operation, even if not particularly specified, shall be furnished, delivered and installed under Division 26 work.
- C. Minor adjustments in location of conduit, boxes, and/or equipment shall be made at no additional charge if so directed prior to their installation. Where offsets in conduits, additional fittings, necessary junction boxes, pull boxes, devices, etc., are required to complete the installation, to clear obstructions or the work of other trades, or for the proper operation of the system, these shall be deemed to be included in the Contract and shall be furnished and installed complete under Division 26 work.
- D. The Contractor shall exchange complete original and revised drawings, details, information, etc., such that all installations are properly coordinated and fit together into a complete and acceptable project.
- E. Where Division 26 work will be installed in proximity to other work or where there is evidence that the Division 26 work will interfere with other work the contractor shall assist in working out space conditions to make a satisfactory adjustment. If so directed by Architect/Engineer, the contractor shall prepare composite working drawings and sections at a suitable scale not less than 1/4 inch - 1'-0", clearly showing how work is to be installed in relation to other work. If Division 26 work is installed before coordinating with other work, or so to cause interferences with other work, the contractor shall make necessary changes in the work to correct the condition.
- F. The contractor shall arrange for all chases in walls, slots in beams, openings in floor or roof, etc., required for the installation of pipes, ducts, conduits, etc., and be held responsible for the proper location of chases required for the work. The contractor shall further be responsible for having work that is required to be built in, on hand in time for proper progress.
- G. The contractor shall make all measurements in the field and shall be responsible for correct fittings. The contractor shall coordinate this work with all other divisions in such a manner as to cause a minimum of conflict or delay. Division 26 work shall be coordinated in advance with other work and report immediately any difficulty which can be anticipated before installing work in question.
- H. The contractor shall coordinate with other work for proper location of roughing-in an connection to equipment.
- I. Refer to Architectural, Structural, Mechanical Drawings and Specifications for construction features, floor and ceiling elevations, finishes, grade elevations, work in other divisions, size and location of pipe chases and head room for same, location of walls, partitions, beams, etc., swing of doors, switches and electrical outlets and the order and time of placement of all work. No work to proceed until all details affecting or affected by these conditions have been completely developed and properly resolved.

1.02 VISIT THE PREMISES

- A. The contractor is directed to visit the premises and become thoroughly familiar with the general layout of the building site and the location of the present utility lines to which connection will be made before submitting a proposal.
- B. The contractor shall also check present grades, ditches, pavements, sewers and/or any other conditions affecting the installation of electrical ducts and utilities under the Contract.
- C. Offsets which may be required to leave new work clear, etc., will be included in the proposal, and the contractor assumes full responsibility for having made a proper and thorough investigation of these requirements.
- D. The Contract is based upon the assumption that the contractor has investigated, understands and accepts all existing conditions.
- E. While all existing storm sewers, sanitary sewers, water mains, gas mains, power lines, telephone lines and other utility services, and/or installations, both underground and overhead, may not have been indicated on the drawings, the contractor will be held expressly responsible for determining the exact location of all such service lines and/or installations encountered in the performance of the Contract and for the provision of suitable protection, support and maintenance.

1.03 SPACE REQUIREMENT

- A. It shall be the responsibility of the contractor to insure that items to be furnished fit the space available, with proper provisions for access to equipment for maintenance and replacement. The contractor shall make necessary field measurements to ascertain space requirements, including those for connections, and removal of parts, and shall furnish and install such sizes and shapes of equipment that the final installation shall suit the true intent and meaning of the drawings and specifications.
- B. All installations shall be made to maintain maximum headroom and clearance around equipment. When space and/or headroom appear inadequate, Contractor shall notify Architect/Engineer prior to proceeding with the installation.
- C. All equipment which must be serviced, operated or maintained shall be located in fully accessible positions. Minor deviations from the contract drawings may be made to allow for better accessibility, but changes of magnitude or which involve extra cost shall not be made without prior approval.
- D. The contractor is responsible to determine that the equipment and appliances which are furnished can be brought into the building. No extra compensation will be allowed for dismantling of equipment to install in the available space or to obtain entrance into the building.
- E. Where equipment that has been approved requires different arrangement or connections from those shown, it shall be the responsibility of the contractor to install the equipment to operate properly and in harmony with the intent of the drawings and specifications. When directed by the Architect/Engineer, the contractor shall submit drawings showing the proposed installation. If the proposed installation is approved, the contractor shall make all incidental changes in conduits, supports, wiring, heaters, panelboards, etc.
- F. The contractor shall provide any additional devices, fittings, and other additional equipment required for the proper operation of the system resulting from the selection of equipment, including all required changes in affected trades. The contractor shall be responsible for the proper location of roughing in and connections by other trades.

1.04 MATERIAL STORAGE

- A. All materials shall be stored in a manner that does not interfere with the progress of work. All items shall be stored in dry spaces.
- B. Materials stored within buildings as approved by the Architect/Engineer shall be distributed in such a manner as to avoid overloading of the structural frame, and never shall be concentrated in such a manner as to exceed the equivalent of fifty (50) pounds per square foot uniformly distributed loading.

END OF SECTION 26 01 00.02

SECTION 26 01 00.03 - CODES, FEES AND STANDARDS

PART 1 - GENERAL

1.01 CODES AND FEES

- A. Unless specifically notes to the contrary, the Contractor shall furnish all equipment materials, labor and install and test in accordance with applicable sections of latest revisions published at date of bid of the following:
1. American Concrete Institute (ACI).
 2. American National Standards Institute (ANSI).
 3. American Society for Testing and Materials (ASTM).
 4. American Institute of Steel Construction (AISC).
 5. Aluminum Association (AA).
 6. National Board of Fire Underwriters (NBFU).
 7. Underwriters Laboratories Inc. (UL).
 8. American Iron and Steel Institutes (AISI).
 9. Institute of Electrical and Electronics Engineers (IEEE).
 10. National Electrical Manufacturers Association (NEMA).
 11. Insulated Cable Engineers Association (ICEA).
 12. National Electrical Safety Code (NESC).
 13. Edison Electric Institute (EEI).
 14. National Electric Code (NEC).
 15. Illuminating Engineering Society (IES).
 16. National Bureau of Standards (NBS).
 17. American Welding Society (AWS).
 18. Association of Edison Illumination Companies (AEIC).
 19. Uniform Building Code (UBC).
 20. American Association of State Highway and Transportation Officials (AASHTO).
 21. Environmental Protection Agency (EPA).
 22. Occupational Safety and Health Act (OSHA).
 23. Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA).
 24. Lighting Protection Institute (LPI) Standard of Practice.
 25. Life Safety Code (LSC).
 26. Local State Fire Marshall's Office (SFM).
 27. National Fire Protection Association (NFPA).
- B. The provisions, rules, regulations and ordinances listed above are to be considered as much a part of these specifications as if repeated herein or attached hereto. All changes or modifications required to conform to such codes, regulations or requirements must be approved by the Architect/Engineer.
- C. The Contractor shall comply with applicable laws, building and construction codes and applicable regulations of governing local, County, State and other applicable codes, including the Utility company. Obtain permits and inspections from authorities having jurisdiction, and pay required charges. Deliver certificates of inspection to the Architect at time of acceptance inspection.

1.02 STANDARDS

- A. All materials shall be new, free of defects and shall be U.L. listed, bear the U.L. Label or be labeled or listed with and approved, nationally recognized Electrical Testing Agency. Where no labeling or listing service is available for certain types of equipment, test data shall be submitted to prove to the Engineer that equipment meets or exceeds available standards.

END OF SECTION 26 01 00.03

SECTION 26 01 00.04 - BASIC MATERIALS AND METHODS

PART 1 - GENERAL

1.01 SCOPE

- A. The work shall include the furnishings of systems as defined in Section 26 01 00.01 "Work Included".
- B. Drawings for the work are diagrammatic, intended to convey the Scope of the Work and to indicate the general arrangement and locations of the work. Because of the scale of the drawings, certain basic items such as conduit fittings, access panels, sleeves, pull and junction boxes may not be shown. Where such items are required by Code or by other sections, such items shall be included.
- C. Equipment Specification may not deal individually with minute items such as components, parts, controls and devices which may be required to produce the equipment performance specified or as required to meet the equipment warranties. Where such items are required, they shall be included by the supplier of the equipment, whether or not specifically indicated.
- D. Coordinate with all trades in submittal of shop drawings. Shop drawings shall detail space conditions to the satisfaction of all concerned trades, subject to review and final acceptance by the Architect. In the event that the Contractor installs work before coordinating with other trades or so as to cause any interference with work of other trades, the necessary changes shall be made in the work to correct the condition, at no additional cost to the Owner.

1.02 SUPERVISION OF THE WORK

- A. Provide field superintendent who has had a minimum of four (4) years previous successful experience on projects of comparable sizes and complexity. Superintendent shall be present at all times that work under this Division is being installed or affected. Superintendent shall be a licensed Journeyman.

1.03 ELECTRICAL CONNECTIONS

- A. All connections shall be tightened to the torque values recommended by that device manufacturers instructions. If these values are not listed, tighten to pound-inch or pound-foot values recommended in UL Standard 486B, a summary of which may be found in the National Electric Code Handbook.

1.04 ACTIVE SERVICES

- A. Existing active services; water, gas, sewer, cable, fiber electric, when encountered, shall be protected against damage. Do not prevent or disturb operation of active services which are to remain. If active services are encountered which require relocation, make request to authorities with jurisdiction or determination of procedures. Where existing services are to be abandoned, they shall be terminated in conformance with requirements of the utility or Municipality having jurisdiction.

1.05 TESTS

- A. Systems shall be tested by the Contractor and placed in proper working order prior to demonstrating systems to Owner.
- B. After work is completed, a load balance test shall be made for each panelboard to demonstrate that with full lighting and mechanical load, the balance between phases is within 10%. Unbalanced beyond this limit shall be corrected, maintaining proper phase relation to neutral at all times. Submit to Engineer, prior to request for final inspection, a written report of existing and final load information.

1.06 IDENTIFICATION

- A. The Contractor shall provide identification for wiring systems and equipment.
- B. Power and lighting circuits shall have conductors color banded, per 26 05 19 Wire and Cable in each junction and pull box.
- C. Panelboards shall have type-written circuit directories installed inside the doors under transparent plastic covers.

1.09 SUBMITTALS

- A. Method of preparing and procedure for submitting Shop Drawings and submittal data shall be in compliance with the general section of these specifications.
- B. Submittal data for electrical equipment shall consist of Shop Drawings and/or catalog cuts showing technical data necessary to evaluate the material or equipment, to include dimensions, wiring diagrams, performance curves, ratings, control sequence and other descriptive data necessary to describe fully the item proposed and its operating characteristics. Any submittal data in following electrical sections, peculiar to that section, is in addition to submittal requirements of this section.

1.10 CUTTING AND PATCHING

- A. Cut existing walls, floors, ceilings, roofs, etc. necessary for the proper installation of new materials, equipment and related electrical items. Provide all necessary framing, lintels, hangers, etc. to maintain the structural integrity of the building system after cutting.
- B. Contractor is responsible for cost to restore or patch adjacent surfaces to original condition. Employ proper professional trade for patching and finishing exposed surfaces.

END OF SECTION 26 01 00.04

SECTION 26 05 19 - WIRE AND CABLE

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. The other Contract Documents complement the requirements of this Section.
The General Conditions apply to the work of this Section.

1.02 SCOPE

- A. Furnish materials, tools, labor and supervision necessary to install wiring systems.

1.03 STANDARDS AND CODES

- A. Methods of installation shall comply with the provisions of applicable Sections of NEC, Article 300.
- B. Materials shall be in accordance with NEC, Article 310 and shall be UL listed for application intended.

1.04 DESCRIPTION

- A. This Section describes the basic materials and methods of installation for general wiring systems of 600 volts and less. Wiring for a higher voltage rating, if required, shall be specified in another Section or as required.
- B. Minimum size conductors shall be No. 12 AWG for power circuits, No. 14 AWG for control wiring and 20 AWG shielded for communication and sensor wiring.

1.05 QUALIFICATIONS

- A. The material used for the wiring systems shall be the products of a manufacturer regularly engaged in the manufacturing of the specified material. Where a manufacturer is named for a particular material, the materials of other manufacturers will be acceptable provided the material meets requirement of the specifications.

PART 2 - PRODUCTS

2.01 WIRE AND CABLE

- A. Wire and cable for power, control and signal circuits shall have copper conductors of not less than 98% conductivity and shall be insulated to 600V except as noted below. Power conductor sizes No. 10 and 12 AWG shall be solid or stranded. Aluminum wire is not permitted.
- B. Type of wire and cable for the various application shall be as follows:
1. Type THW, THWN or XHHW (75°C): Use for branch circuits, and equipment power feeders in wet and dry locations, No. 12 AWG minimum.
 2. Type RHH, THHN or XHHW (90°C): Use for branch circuits, and equipment power feeders in dry locations only, No. 12 AWG minimum.

2.02 CONDUCTOR COLOR CODING

- A. Wiring systems shall be color coded. Conductor insulation shall be colored in sizes up through No. 8 AWG, conductors No. 6 AWG and larger shall have black insulation and shall be phase color coded with one-half inch band of colored tape at all junctions and terminations. Colors shall be assigned to each conductor to match the existing building systems

2.03 CONNECTORS - POWER WIRING

- A. In-line splices and taps for conductor sizes No. 8 AWG and smaller; use 3M Co. Scotchloc vinyl insulated spring connectors, or equivalent.
- B. Insulate splices and taps to thickness of conductor insulation with half-lapped of 3M Scotch brand No. 33 vinyl electrical tape. Connectors having irregular surfaces; fill voids and smooth contours with 3M Scotchfil electrical putty prior to tapping.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Wire shall not be installed in the conduit system until the building is enclosed and wet work completed.
- B. Conduit shall be swabbed free of moisture and debris prior to pulling in wire.

3.02 INSTALLATION

- A. Splices in branch circuit wires shall be made only in accessible junction boxes.
- B. Power cable shall be pulled with the use of approved pulling compound for long runs.

END OF SECTION 26 05 19

SECTION 26 05 26 - GROUNDING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. The other Contract Document complement the requirements of this Section.
The General Conditions apply to the work of this Section.

1.02 SCOPE

- A. This section deals with the grounding of service equipment, transformers, non-current carrying conductive surfaces of equipment, metal buildings, structures and other equipment.

1.03 STANDARDS AND CODES

- A. All grounding connections shall be installed in accordance with the National Electrical Code and applicable local code requirements. Such codes shall be considered minimum requirements and the installation of the grounding system shall insure freedom from dangerous shock exposure and shall provide a low impedance ground fault path to permit operation of overcurrent and ground fault protective devices.
 - 1. NEC Article 250
 - 2. National Electrical Safety Code.

1.04 QUALIFICATIONS

- A. Use Thomas and Betts compression ground system, exothermic welds or an approved listed compression type system.

PART 2 - PRODUCTS

2.01 CONDUCTORS

- A. All grounding conductors whether insulated or not shall be copper.

2.02 GROUND RODS

- A. All ground rods shall be copper clad steel, 3/4 inch by 10 feet solid type.

2.03 GROUND CONNECTIONS

- A. The connection of a grounding conductor to ground rods or ground conductor to ground conductor shall be by means of Thomas & Betts compression ground system, or exothermic weld.
- B. Ground connections to building steel or equipment shall be bolted using T & B compression type lugs.
- C. Slab penetrations of ground conductors shall terminate on T & B compression type flush plate connectors installed flush in slab. Interior connections of flush plate connectors shall be made using compression lugs.
- D. Grounding conductor connections at conduit terminations shall be made by approved listed grounding bushings.

PART 3 – EXECUTION

3.01 BRANCH CIRCUITS

- A. All feeders and branch circuits shall have installed in the same raceway as the circuit conductors, an insulated copper grounding conductor sized in accordance with Table 250-95 of the National Electrical Code unless such a grounding conductor is shown to be larger on the plans or specified to be larger elsewhere in the specifications.

3.02 EXPOSED NON-CURRENT CARRYING CONDUCTIVE SURFACES

- A. All exposed non-current carrying conductive surfaces of electrical equipment shall be grounded to the equipment conductor run with the circuit conductors or a separate ground as shown on the drawings.

END OF SECTION 26 05 26

SECTION 26 05 33.13 - CONDUIT SYSTEMS

PART 1 - GENERAL

1.01 SCOPE

- A. Furnish materials, tools, labor and supervision necessary to fabricate and install a complete electrical conduit system.
- B. Conduit systems shall be provided for all wiring systems, except where the Drawings or other Sections of the Specifications indicate that certain wiring may be installed without conduit.

1.02 STANDARDS AND CODES

- A. Methods of fabrication and installation shall copy with the provisions of all applicable Sections of the NEC.
- B. Materials shall be UL and NEC approved for the application intended.

1.03 DESCRIPTION

- A. This section describes the basic materials and methods of installation for conduit systems.

1.04 QUALIFICATIONS

- A. The materials used in the fabrication of the conduit system shall be products of a manufacturer regularly engaged in the manufacturing of the specified material. Where a manufacturer is named for a particular material, the material of other manufacturers shall be acceptable provided the materials meets requirements of the Specification.

PART 2 - PRODUCTS

2.01 CONDUIT

- A. Electrical Metallic Tubing (EMT):
Thinwall, electrically welded cold rolled steel conduit, galvanized inside and out by electrogalvanized process. Use for conduit installed in stud walls, masonry walls, above suspended ceilings and were exposed in interior spaces not subject to physical abuse.
- B. Flexible Metal Conduit:
Formed at one continuous length of spirally wound electrogalvanized steel strip. Use for final connections to any equipment subject to movement or vibration. Connections to fixtures shall be limited to 6 feet in length. All other connections shall be a maximum of 1'-6" in length.
- C. Electrical non-metallic tubing and rigid non-metallic conduit shall NOT be used within the building.

2.02 CONDUIT FITTINGS

- A. Metallic Tubing Fittings:
Set screw type steel, except in wet or concrete tight applications. For wet or concrete tight applications, use compression type galvanized steel. Use connectors with nylon insulated throats at cabinets, boxes and gutters. Indenter type and malleable iron fittings will not be allowed.
- B. Flexible Metal Conduit Fittings:
Squeeze or screw type galvanized steel with nylon insulated throats.
- C. Conduit Fittings:
Exposed conduit fittings shall be Condulet type for sharp turns, tees, etc.

2.03 OUTLET BOXES

- A. Material, size and installation for outlet boxes shall comply with NEC. Article 370.
- B. Boxes shall be Raco, Steel City, Appleton or equivalent.
In general, the type of boxes shall be as follows:
 - 1. In stud walls; For single outlet use 4 inches square by 2-1/8 inches deep box. For ganged outlets use 4-1/2 inches high by 1-5/8 inches deep multiple gang boxes. Boxes to be provide with raised covers of depth as required for thickness of wall materials.
 - 2. Surface-mounted wall outlets; For single outlet use 2-1/8 inches deep handy box, for double outlets use 4 inches square by 2-1/8 inches deep box. For more than two ganged outlets use 3-3/4 inches x 2-1/2 inches deep multiple gang masonry boxes. Boxes to be provided with 1/2 inch raised cover as required for device.

2.04 PULL AND JUNCTION BOXES

- A. Construction, sizes and installation of pull and junction boxes shall comply with NEC, Article 370 and tables 270-6 (a) and (b).
- B. Pull and junction boxes not specifically described in NEC, Article 370, shall be fabricated of heavy gauge galvanized steel with screw covers and enamel finish.
- C. Pull and junction boxes for installation in poured concrete floors shall be flush type, cast iron, with watertight gasketed covers. Boxes for installation in floors with tile or carpet floor covering shall have recessed brass covers and brass carpet flanges to accommodate the floor covering.

2.05 HANGERS AND SUPPORTS

- A. Provide conduit hanger and support devices of approved type for method of supporting required, to include: structural steel members, suspension rods, conduit clamps, concrete inserts, expansion shields, beam clamps and welding pins. All devices shall have galvanized finish or other approved corrosion resistance finish. All supporting devices shall be manufactured for the purpose. Hangar wire and similar supports shall not be used. In general, hangers and supports shall be as follows:
 - 1. Where single or multiple run of conduit is routed on surface of structure; use conduit clamps mounted on Unistrut channel so as to maintain not less than 1 inch clearance between conduit and structure.
 - 2. Where single run of conduit is suspended from overhead; use split ring conduit clamp suspended by steel drop rod not less than 3/8 inch diameter.
 - 3. Where multiple parallel runs of conduit are suspended from overhead; use split ring conduit clamps uniformly spaced and supported on trapeze hangers fabricated of Unistrut channels, suspended by not less than 1/2 inch steel drop rod.
 - 4. Where conduit is routed in steel stud partitions, use metal stud clips, style as appropriate for application, equivalent to "Caddy" brand.
 - 5. Maximum hanger and support spacing shall be in accordance with NEC. Regardless of listed spacing, provide additional hangers or supports at not more than 2'-0" from each change of direction and at each side of any box or fitting.
- B. Hangers and supports shall be anchored to structure as follows:
 - 1. Hangers and supports anchored to poured concrete; use malleable iron or steel concrete inserts attached to concrete forms.
 - 2. Hangers or supports anchored to structural steel; use beam clamps and/or steel channels as required by structural system.
 - 3. Hangers or supports anchored to metal deck; use spring clips or approved welding pins. Maximum permissible load on each hanger shall not exceed 50 pound.

PART 3 - EXECUTION

3.01 CONDUIT INSTALLATION

- A. In general, horizontal runs of conduit shall be installed in ceiling spaces. Conduit for convenience outlets, wall-mounted fixtures and other wall outlets shall be routed overhead and dropped through block cells or stud walls to the outlet. Conduit shall not be installed in or below concrete floor slabs except where noted on drawings or required to serve open floor area outlets or equipment.
- B. Generally, conduit shall be concealed, except in shafts, mechanical equipment rooms, and at connections to surface boxes and free standing equipment, and as otherwise noted.
- C. All conduit shall be routed in lines parallel to building lines.
- D. No conduit shall be installed closer than 6 inches to piping installed by other trades.
- E. Minimum size conduit shall be 1/2 inch trade size. Where specific size is not called for on Drawings or in specification, Contractor shall select size required from Chapter 9 of NEC. Where specific sizes required by Drawings or Specifications are larger than Code requires, the larger size shall be installed.
- F. Install the conduit system mechanically and electrically, continuous from outlet and to cabinets, junction or pull boxes, Conduit shall enter and be secured to cabinets and boxes in such a manner that all parts of the system will have electrical continuity.
- G. Install insulated ground wire in all raceways. Size per NEC 250.

3.02 OUTLET BOX INSTALLATION

- A. Outlet boxes shall be installed for, but not limited to, fixtures, switches, receptacles and other devices.
- B. Approximate location of outlets are shown on the plans, but each location as shown shall be checked by the Contractor before installing the outlet box.
- C. Wall boxes installed flush in common wall shall generally not be back-to-back or through-wall types. Where it is necessary to install boxes back-to-back, install sound absorption material between boxes and plug nipple connection with duct seal.
- D. Boxes located on opposite sides of a common wall that are closely connected by conduit shall have the conduit openings plugged with duct seal.
- E. Outlet boxes shall be installed plumb and square with wall face and with front of box or cover located within 1/8 inch of face of finish wall. Boxes in masonry shall be set with bottom or top of box tight to the masonry unit, unless otherwise specified.

3.03 PULL AND JUNCTION BOX INSTALLATION

- A. Install pull boxes, junction boxes where required by Code and where required to facilitate installation of the wiring. In longer conduit runs, install a pull box for at least each 100 feet of conduit.
- B. For concealed conduit, install boxes flush with ceiling or wall, with covers accessible and easily removable. Where flush boxes are installed in finished ceilings or walls, provide cover which shall exceed the box face dimensions by a sufficient amount to allow no gap between box and finished material.

- C. Boxes shall not be located in finished, occupied rooms, without prior approval of Architect/Engineer.

3.04 HANGER SUPPORT INSTALLATION

- A. Hangers and supports shall be installed for all conduit and boxes.
Supports shall be manufactured for the purpose.
- B. Conduit and boxes shall not be attached to or supported from mechanical pipes, plumbing pipes or sheet metal ducts.
- C. Tie wire shall not be used.
- D. Work includes support frames for conduit runs to equipment.

END OF SECTION 26 05 33.13

SECTION 26 27 26 - WIRING DEVICES AND PLATES

PART 1 - GENERAL

1.01 SCOPE

- A. Provide materials, equipment, labor and supervision necessary to install Wiring Devices.

1.02 STANDARDS AND CODES

- A. Except where otherwise required by this Section, the following Standards and Codes shall govern:
1. Receptacles; NEC Article 410K
 2. UL listed
 3. NEMA Standards

1.03 QUALIFICATIONS

- A. Provide products, as approved by the Architect, from one of the following manufacturers:
1. "Hubbell".
 2. "General Electric".
 3. "Legrand/Pass & Seymour".
 4. "Lutron".
 5. "Leviton".
 6. "Arrow Hart".

PART 2 - PRODUCTS

2.01 GENERAL

- A. All wiring devices shall be "Specification Grade" except where higher grade is called for.

2.02 RECEPTACLES

- A. Receptacles shall be:
1. Duplex Receptacle - 2 pole, 3 wire grounding type, back and side wired, 20 amp, 125 volt, "Hubbell" No. 5362.
 2. Receptacles for power and special purpose outlets shall have characteristics and NEMA configurations as per Electrical Symbols list. Supply as needed.
 3. Color: Grey

2.03 COVER PLATES

- A. Stainless Steel.
- B. Provide plates for all receptacles, and outlets throughout the entire project.
Provide blank plates for all unused outlets.
- C. Plates for outlets in unfinished spaces shall be of the handy box type.

2.04 GROUND FAULT INTERRUPTING RECEPTACLES (GFI)

- A. Ground fault interrupting receptacles shall be duplex feed through type with test and reset buttons, equal to "Legrand/Pass&Seymour" No. 1591F.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Wiring devices shall be installed and located as follows, unless noted otherwise on the Drawings:
 - 1. Receptacles: 16 inches above finished floors typically; 44 inches above finished floors or 8 inches above countertops; 48 inches above finished floors in shops, mechanical rooms, utility rooms, service spaces, and similar areas where required by the NEC.
 - 3. Dimensions are to bottom of outlet box.
- B. In masonry walls, switches and receptacle heights shall be adjusted as required so outlets are at nearest mortar joint to specified height.
- C. Where walls have wainscot finish, switch height shall be adjusted as required, so switch is either all in wainscot or all in wall above wainscot.
- D. Prior to roughing-in outlet boxes, Contractor shall verify from general construction drawings; door swings, type of wall finishes and locations for counters and work benches.

END OF SECTION 26 27 26