

PROJECT MANUAL

DESIGN/BUILD
MAINTENANCE STORAGE GARAGE

AT

ANSONIA SCHOOLS

ANSONIA BOARD OF EDUCATION

20 PULASKI HIGHWAY

ANSONIA, CONNECTICUT

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March 6, 2020

ANSONIA SCHOOLS MAINTENANCE STORAGE GARAGE

**ANSONIA MAINTENANCE STORAGE GARAGE
20 PULASKI HIGHWAY
ANSONIA, CONNECTICUT 06401**

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INVITATION TO PROPOSERS:
FOR THE
DESIGN BUILD OF
MAINTENANCE STORAGE GARAGE
FOR
ANSONIA PUBLIC SCHOOLS
ANSONIA, CT

Sealed proposals are invited by Ansonia Board of Education until 2:00 p.m. on Thursday, April 2, 2020 at the Robert A. Zuraw Administrative Offices 42 Grove Street Ansonia, CT for the above-named project.

Proposals received after the above time will not be accepted. Proposals will be opened publicly and read aloud beginning at 2:05 p.m. All interested parties are invited to attend.

A pre-proposal conference will be held at the Maintenance Garage at 20 Pulaski Highway Ansonia, CT at 9:30 AM, on Tuesday, March 24, 2020. This conference will afford Contractors an opportunity to visit the project site to fully acquaint themselves with the existing conditions and limitations of the proposed work.

Copies of the Contract Documents are available at no cost at www.ansoniam.org or www.cityofansoniam.com. Bid documents may also be obtained directly from The Color Company, 85 Willow Street New Haven (Tel 203-624-0440) at a cost to the Contractor. In order to receive addendum and other information regarding this Bid, if any, interested firms should reply to bevans@ansoniam.org with the firm name and contact person.

A proposal bond for five percent (5%) of the base bid cost is required and must accompany each proposal. Bids must be held firm for one hundred twenty (120) days beyond the bid opening date.

The successful proposer must file a one hundred percent (100%) Performance Bond, a one hundred percent (100%) Labor & Materials Bond and a Certificate of Insurance with the City within ten (10) days of notice of bid award.

No proposal shall be withdrawn for a period of forty-five (45) days subsequent to the opening of bids or until the next work day immediately following said period, without the consent of the Owner.

The City of Ansonia and the Ansonia Board of Education reserves the right to accept or reject any or all proposals, to reduce the scope of the project to reflect available funding, and to waive any informalities in the bidding, if such actions are in the best interest of the City and or Board.

Prospective proposers may contact: Donald W. Smith, Jr., P.E., via email at dwsjrpe@sbcglobal.net or telephone (203) 888-4904 for additional information regarding the Project.

We do business in accordance with all applicable federal laws and regulations.

DATED: March 6, 2020

DRAFT AIA® Document A701™ – 2018

Instructions to Bidders

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

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THE OWNER:

(Name, legal status, address, and other information)

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THE ARCHITECT:

(Name, legal status, address, and other information)

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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.

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

FEDERAL, STATE, AND LOCAL LAWS MAY IMPOSE REQUIREMENTS ON PUBLIC PROCUREMENT CONTRACTS. CONSULT LOCAL AUTHORITIES OR AN ATTORNEY TO VERIFY REQUIREMENTS APPLICABLE TO THIS PROCUREMENT BEFORE COMPLETING THIS FORM.

It is intended that AIA Document G612™-2017, Owner's Instructions to the Architect, Parts A and B will be completed prior to using this document.



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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 any other bidding forms. The Proposed Contract Documents consist of the unexecuted form of Agreement between the Owner and Contractor and that Agreement's Exhibits, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, all Addenda, and all other documents enumerated in Article 8 of these Instructions.

§ 1.2 Definitions set forth in the General Conditions of the Contract for Construction, or in other Proposed Contract Documents apply to the Bidding Documents.

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

§ 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, to which Work may be added or deleted by 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, or that does not change, 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 By submitting a Bid, the Bidder represents that:

- .1 the Bidder has read and understands the Bidding Documents;
- .2 the Bidder understands how the Bidding Documents relate to other portions of the Project, if any, being bid concurrently or presently under construction;
- .3 the Bid complies with the Bidding Documents;
- .4 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 observations with the requirements of the Proposed Contract Documents;
- .5 the Bid is based upon the materials, equipment, and systems required by the Bidding Documents without exception; and
- .6 the Bidder has read and understands the provisions for liquidated damages, if any, set forth in the form of Agreement between the Owner and Contractor.

ARTICLE 3 BIDDING DOCUMENTS

§ 3.1 Distribution

§ 3.1.1 Bidders shall obtain complete Bidding Documents, as indicated below, from the issuing office designated in the advertisement or invitation to bid, for the deposit sum, if any, stated therein.

(Indicate how, such as by email, website, host site/platform, paper copy, or other method Bidders shall obtain Bidding Documents.)

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§ 3.1.2 Any required deposit shall be refunded to Bidders who submit a bona fide Bid and return the paper Bidding Documents in good condition within ten days after receipt of Bids. The cost to replace missing or damaged paper

documents will be deducted from the deposit. A Bidder receiving a Contract award may retain the paper Bidding Documents, and the Bidder's deposit will be refunded.

§ 3.1.3 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.

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

§ 3.1.5 The Bidding Documents will be available for the sole purpose of obtaining Bids on the Work. No license or grant of use is conferred by distribution of the Bidding Documents.

§ 3.2 Modification or Interpretation of Bidding Documents

§ 3.2.1 The Bidder shall carefully study the Bidding Documents, shall examine the site and local conditions, and shall notify the Architect of errors, inconsistencies, or ambiguities discovered and request clarification or interpretation pursuant to Section 3.2.2.

§ 3.2.2 Requests for clarification or interpretation of the Bidding Documents shall be submitted by the Bidder in writing and shall be received by the Architect at least seven days prior to the date for receipt of Bids. *(Indicate how, such as by email, website, host site/platform, paper copy, or other method Bidders shall submit requests for clarification and interpretation.)*

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§ 3.2.3 Modifications and interpretations of the Bidding Documents shall be made by Addendum. Modifications and interpretations of the Bidding Documents made in any other manner shall 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 Substitution Process

§ 3.3.2.1 Written requests for substitutions shall be received by the Architect at least ten days prior to the date for receipt of Bids. Requests shall be submitted in the same manner as that established for submitting clarifications and interpretations in Section 3.2.2.

§ 3.3.2.2 Bidders shall submit substitution requests on a Substitution Request Form if one is provided in the Bidding Documents.

§ 3.3.2.3 If a Substitution Request Form is not provided, requests shall include (1) the name of the material or equipment specified in the Bidding Documents; (2) the reason for the requested substitution; (3) a complete description of the proposed substitution including the name of the material or equipment proposed as the substitute, performance and test data, and relevant drawings; and (4) any other information necessary for an evaluation. The request shall include a statement setting forth changes in other materials, equipment, or other portions of the Work, including changes in the work of other contracts or the impact on any Project Certifications (such as LEED), that will result from incorporation of the proposed substitution.

§ 3.3.3 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.

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

§ 3.3.5 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 Bidders known by the issuing office to have received complete Bidding Documents.

(Indicate how, such as by email, website, host site/platform, paper copy, or other method Addenda will be transmitted.)

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§ 3.4.2 Addenda will be available where Bidding Documents are on file.

§ 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 Prior to submitting a Bid, each Bidder shall ascertain 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 or identified in the Bidding Documents.

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

§ 4.1.3 Sums shall be expressed in both words and numbers, unless noted otherwise on the bid form. In case of discrepancy, the amount entered in words shall govern.

§ 4.1.4 Edits to entries made on paper bid forms 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" or as required by the bid form.

§ 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 neither make 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 and legal status of the Bidder. As part of the documentation submitted with the Bid, the Bidder shall provide evidence of its legal authority to perform the Work in the jurisdiction where the Project is located. Each copy of the Bid shall be signed by the person or persons legally authorized to bind the Bidder to a contract. A Bid by a corporation shall further name 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.

§ 4.1.8 A Bidder shall incur all costs associated with the preparation of its Bid.

§ 4.2 Bid Security

§ 4.2.1 Each Bid shall be accompanied by the following bid security:

(Insert the form and amount of bid security.)

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§ 4.2.2 The Bidder pledges to enter into a Contract with the Owner on the terms stated in the Bid and shall, 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. In the event the Owner fails to comply with Section 6.2, the amount of the bid security shall not be forfeited to the Owner.

§ 4.2.3 If a surety bond is required as bid security, it shall be written on AIA Document A310™, Bid Bond, unless otherwise provided in the Bidding Documents. The attorney-in-fact who executes the bond on behalf of the surety shall affix to the bond a certified and current copy of an acceptable power of attorney. The Bidder shall provide surety bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.

§ 4.2.4 The Owner will have the right to retain the bid security of Bidders to whom an award is being considered until (a) the Contract has been executed and bonds, if required, have been furnished; (b) the specified time has elapsed so that Bids may be withdrawn; or (c) all Bids have been rejected. However, if no Contract has been awarded or a Bidder has not been notified of the acceptance of its Bid, a Bidder may, beginning days after the opening of Bids, withdraw its Bid and request the return of its bid security.

§ 4.3 Submission of Bids

§ 4.3.1 A Bidder shall submit its Bid as indicated below:

(Indicate how, such as by website, host site/platform, paper copy, or other method Bidders shall submit their Bid.)

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§ 4.3.2 Paper copies of the Bid, the bid security, 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.

§ 4.3.3 Bids shall be submitted by the date and time and at the place indicated in the invitation to bid. Bids submitted after the date and time for receipt of Bids, or at an incorrect place, will not be accepted.

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

§ 4.3.5 A Bid submitted by any method other than as provided in this Section 4.3 will not be accepted.

§ 4.4 Modification or Withdrawal of Bid

§ 4.4.1 Prior to the date and time designated for receipt of Bids, a Bidder may submit a new Bid to replace a Bid previously submitted, or withdraw its Bid entirely, by notice to the party designated to receive the Bids. Such notice shall be received and duly recorded by the receiving party on or before the date and time set for receipt of Bids. The receiving party shall verify that replaced or withdrawn Bids are removed from the other submitted Bids and not considered. Notice of submission of a replacement Bid or withdrawal of a Bid shall be worded so as not to reveal the amount of the original Bid.

§ 4.4.2 Withdrawn Bids may be resubmitted up to the date and time designated for the receipt of Bids in the same format as that established in Section 4.3, provided they fully conform with these Instructions to Bidders. Bid security shall be in an amount sufficient for the Bid as resubmitted.

§ 4.4.3 After the date and time designated for receipt of Bids, a Bidder who discovers that it made a clerical error in its Bid shall notify the Architect of such error within two days, or pursuant to a timeframe specified by the law of the jurisdiction where the Project is located, requesting withdrawal of its Bid. Upon providing evidence of such error to the reasonable satisfaction of the Architect, the Bid shall be withdrawn and not resubmitted. If a Bid is withdrawn pursuant to this Section 4.4.3, the bid security will be attended to as follows:

(State the terms and conditions, such as Bid rank, for returning or retaining the bid security.)

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ARTICLE 5 CONSIDERATION OF BIDS

§ 5.1 Opening of Bids

If stipulated in an advertisement or invitation to bid, or when otherwise required by law, Bids properly identified and received within the specified time limits will be publicly opened and read aloud. A summary of the Bids may be made available to Bidders.

§ 5.2 Rejection of Bids

Unless otherwise prohibited by law, the Owner shall have the right to reject any or all Bids.

§ 5.3 Acceptance of Bid (Award)

§ 5.3.1 It is the intent of the Owner to award a Contract to the lowest responsive and responsible Bidder, provided the Bid has been submitted in accordance with the requirements of the Bidding Documents. Unless otherwise prohibited by law, 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 best interests.

§ 5.3.2 Unless otherwise prohibited by law, 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 lowest responsive and responsible 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 and within the timeframe specified by the Architect, a properly executed AIA Document A305™, Contractor's Qualification Statement, unless such a Statement has been previously required and submitted for this Bid.

§ 6.2 Owner's Financial Capability

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

§ 6.3 Submittals

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

- .1 a designation of the Work to be performed with the Bidder's own forces;
- .2 names of the principal products and systems proposed for the Work and the manufacturers and suppliers of each; 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 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, withdraw the Bid or submit an acceptable substitute person or entity. The Bidder may also submit any required adjustment in the Base Bid or Alternate Bid to account for 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.

§ 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 The Bidder shall provide surety bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.

§ 7.1.4 Unless otherwise indicated below, the Penal Sum of the Payment and Performance Bonds shall be the amount of the Contract Sum.

(If Payment or Performance Bonds are to be in an amount other than 100% of the Contract Sum, indicate the dollar amount or percentage of the Contract Sum.)

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§ 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 commence sooner 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.

§ 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 to the bond a certified and current copy of the power of attorney.

ARTICLE 8 ENUMERATION OF THE PROPOSED CONTRACT DOCUMENTS

§ 8.1 Copies of the proposed Contract Documents have been made available to the Bidder and consist of the following documents:

- 1 AIA Document A101™–2017, Standard Form of Agreement Between Owner and Contractor, unless otherwise stated below.

(Insert the complete AIA Document number, including year, and Document title.)

« »

- 2 AIA Document A101™–2017, Exhibit A, Insurance and Bonds, unless otherwise stated below.

(Insert the complete AIA Document number, including year, and Document title.)

« »

- 3 AIA Document A201™–2017, General Conditions of the Contract for Construction, unless otherwise stated below.

(Insert the complete AIA Document number, including year, and Document title.)

« »

- 4 AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, dated as indicated below:

(Insert the date of the E203-2013.)

« »

- 5 Drawings

Number

Title

Date

« »

.6 Specifications

Section	Title	Date	Pages
<< >>			

.7 Addenda:

Number	Date	Pages
<< >>		

.8 Other Exhibits:

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

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

<< >>

[] The Sustainability Plan:

Title	Date	Pages
<< >>		

[] Supplementary and other Conditions of the Contract:

Document	Title	Date	Pages
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.9 Other documents listed below:

(List here any additional documents that are intended to form part of the Proposed Contract Documents.)

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PART 1 - GENERAL

1.1 COMPLETION DATE

- A. All work as required by these specifications and drawings shall be completed by the date stipulated in the Contractor's proposal form. There is no exception to this contract requirement, unless approved otherwise by contract change order.
- B. If the Contractor neglects, fails or refuses to achieve substantial completion by 11:59 pm by the date stipulated in the Contractor's proposal form for each of the proposal components requiring durations or deadlines, liquidated damages of Five Hundred Dollars (\$500.00) per day or part thereof shall be due for each proposal component to the Owner and subtracted from the unpaid contract amount or bond held by the Owner. "Substantial completion" is as defined in the General Conditions of the Contract for Construction, AIA Document A201 included in this project manual. "Substantial completion" is further defined as the date at which the local authorities with jurisdiction over this project grant a temporary or permanent certificate of occupancy (if required for occupancy) for each project area.

1.2 QUESTIONS

- A. Questions regarding this proposal can be directed to:

Proposal Procedures/Administrative

Mr. Robert Evans
Facilities Director
City of Ansonia
253 Main Street
Ansonia, CT 06401
Phone (203) 732-3286

Technical/Construction

Donald W. Smith, Jr., P.E.
Consulting Engineer
56 Greenwood Cr.
Seymour, CT 06483
(203) 888-4904
Email: dwsjrpe@sbcglobal.net

RESPONSIBILITY FOR MEASUREMENT OF QUANTITIES

- B. The Contractor shall have sole responsibility for the accuracy of all measurements and for estimating the material quantities required to satisfy these specifications.

1.3 DISCREPANCIES AND ADDENDA

- A. Should a Bidder find any discrepancies in the Drawings and Specifications, or should they be in doubt as to their meaning, they shall notify the Owner at once, who will send a written Addendum to all Bidders concerned. Oral instructions or decisions, unless confirmed by Addenda, will not be considered valid, legal or binding. No change order requests will be authorized or considered because of the failure of the Contractor to include work called for in the Addenda in their bid.

- B. No interpretations of the meaning of the plans, specifications or other contract documents will be made orally to any proposer. Every request for such interpretation should be in writing addressed to the Engineer and to be given consideration must be received at the Engineers' Office at 56 Greenwood Circle, Seymour, CT 06483 no later than 5:00 PM on March 30, 2020.
- C. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be posted online and emailed to all prospective proposers (at the respective addresses furnished for such purposes) not later than twenty four (24) hours prior to the date fixed for the opening of bids. Failure of any proposer to receive any such addendum or interpretation shall not release any proposer from any obligations under his proposal as submitted, provided notice by certified mail has been sent to the address furnished by such prospective proposer for the transmittal of notices, addenda and interpretations.

1.4 GENERAL INFORMATION

A. BIDS AND REJECTION OF BIDS

The City of Ansonia reserves the right to reject the proposal of any party who has participated in a previous contract(s) with the City and whose performance on said contract(s) is deemed, in the sole judgement of the City to have been unsatisfactory.

The City of Ansonia reserves the right to waive technical defects in the bids; to reject any bids which do not conform to the terms and conditions described herein; to accept or reject any part of any bid, to negotiate with anyone making a proposal for terms and conditions deemed to be in the best interest of the City and to reject all bids and again invite bids, all in the best interest of the City.

B. CONNECTICUT SALES AND USE TAX

The Owner is a tax-exempt organization. All contractors shall familiarize themselves with the current regulations of the State Tax Department. The tax on labor, materials or supplies exempted by such regulations shall not be included as part of the contractor's bid.

C. CONTRACTOR'S QUALIFICATIONS

All contractors submitting bids on this work shall file with the City at the time of proposal opening, a Statement of Proposer's Qualifications on the appropriate form. The City reserves the right to reject any proposal where an investigation of the available information does not satisfy the Owner that the proposer is qualified to properly carry out the terms of the agreement. The Owner reserves the right to request additional information regarding the proposer's financial resources and construction experience if necessary.

D. SUBCONTRACTORS

- A. The successful proposer shall file a complete list of the names and addresses of competent, responsible and qualified subcontractors who are actually going to perform the work within three (3) working days after being notified of an Intent to Award. This list shall be furnished in triplicate.

- B. Failure on the part of the proposer to file the names of subcontractors shall be cause for rejection of the proposal or annulment of the Intent to Award.

E. CONTRACT TIME LIMITS

- A. A Notice of Intent to Award for the proposed work is anticipated to be issued on or about April 15, 2020.
- B. All work shall be substantially complete by December 1, 2020. If the work is not completed by this date, liquidated damages will be assessed by the Owner at the rate of five hundred dollars (\$ 500.00) per calendar day thereafter. Delays caused through no fault of the Contractor shall not be assessed a liquidated damage.

F. QUANTITY OF WORK

- A. Proposers must satisfy themselves by personal examination of the site of the work and the plans relating thereto; and form their own judgements of the quantities and character of the work to be done and make their bids accordingly.
- B. No claims on account of the nature, or the amount of the work to be done, or the ground where it is to be executed, will be considered or allowed by the Owner, except for those items specifically stated on the Proposal Form.

1.5 MODIFICATIONS TO AIA DOCUMENT A701, Instructions to Bidders, 2018.

The following sections modify the provisions and procedures to the degree listed in the sections and articles listed in these supplementary instructions.

ARTICLE 3 Make the following changes:

- 3.1.1 **Delete** all but the first sentence and “, as indicated below,” from the first sentence.
- 3.1.2 **Delete** in its entirety.
- 3.2.2 **Delete** all but the first sentence.
 - 3.3.2.1 **Delete** all but the first sentence.
- 3.4.1 **Delete** all but the first sentence.
- 3.4.3 **Delete the phrase** "four days prior to the date for receipt" and insert "24 hours prior to the date and time for receipt".

ARTICLE 4 Make the following changes:

- 4.2.1 **Revise to read as follows:** “Each Proposal shall be accompanied by the proposal security as indicated on the Invitation to Bid.”
- 4.2.4 **Revise last sentence to read as follows:** “However, if no Contract has been awarded or a Bidder has not been notified of the acceptance of its Bid, a Bidder may withdraw its

Proposal and request the return of its proposal security after the length of time on the Invitation to Bid.”

4.3.1 **Add to the end the following:** “Paper copy”.

4.4.3 **Add to the end the following:** “Owner will return proposal security to the Bidder.”

ARTICLE 5 Add the following:

5.3.3 Contractors who have paid liquidated damages or penalties to an Owner for failing to comply with the schedule of any project in the last five (5) years are disqualified from this project, subject to an appeal to the Owner’s Representative(s) where the Contractor demonstrates that 1) subsequent to the project which resulted in penalties the Contractor completed two (2) similar projects or demonstrably similar projects in a timely fashion; and 2) that the factors which lead to delays and penalties in the first instance no longer exist. Payment of liquidated damages or penalties may also be defined as "having been found by the Owner to be in non-compliance with the project schedule and negotiating a financial settlement for the project in which value was returned to the Owner, either via change orders or 'work-in-kind' or other recognized manner". The Contractor under consideration shall respond to this clause in the Contractor's Qualification Statement, A305 as indicated in Section 6.1 of the Instructions to Bidders, A701.

ARTICLE 6 Add the following:

6.1.1 The Owner will make investigations as he deems necessary to determine the ability of the Bidder to perform the Work, and the Bidder shall furnish the Owner all such information and data for this purpose as the Owner may request.

6.4 Work Phasing Schedule

Bidders to whom award of the Contractor is under consideration shall submit to the Architect within fifteen (15) days of the Contract date, a detailed work Phasing Schedule describing the bodies of work to be undertaken and areas of the project to be addressed in per week periods between the Award of the Contract and the Bidder's proposed date of Substantial Completion.

ARTICLE 7 Add the following:

7.3 The Contractor and the 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.

7.4 If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except to participate in conferences as provided in Subparagraph 7.5.1.

7.5 If there is no Owner Default, the Surety's obligation under this Bond shall arise after:

7.5.1 The Owner has notified the Contractor and the Surety at its address described in Paragraph 7.12 below that the Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with the Contractor and the Surety to be held not later than fifteen days after receipt of such notice to discuss methods of

performing the Construction Contract. 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 and

- 7.5.2 The Owner has declared a Contractor Default and formally terminated the Contractor's right to complete the contract. Such Contractor Default shall not be declared earlier than twenty (20) days after the Contractor and the Surety have received notice as provided in Subparagraph 7.5.1; and
- 7.5.3 The Owner has agreed to pay the Balance of the Contract Price to the Surety in accordance with the terms of the Construction Contract or to a contractor selected to perform the Construction Contract in accordance with the terms of the contract with the Owner.
- 7.6 When the Owner has satisfied the conditions of Paragraph 7.5.3, the Surety shall promptly and at the Surety's expense take one of the following actions:
- 7.6.1 Arrange for the Contractor, with consent of the Owner, to perform and complete the Construction Contract; or
- 7.6.2 Undertake to perform and complete the Construction Contract itself, through its agents or through independent contractors; or
- 7.6.3 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 the 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 Paragraph 7.8) in excess of the Balance of the Contract Price incurred by the Owner resulting from the Contractor's default: or
- 7.6.4 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, tender payment therefore to the Owner; or
 - .2 Deny liability in whole or in part and notify the Owner citing reasons therefore.
- 7.7 If the Surety does not proceed as provided in Paragraph 7.6 with reasonable promptness, the Surety shall be deemed to be in default on this Bond fifteen (15) 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 Subparagraph 7.6.4, and the Owner refuses the payment rendered 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.
- 7.8 After the Owner has terminated the Contractor's right to complete the Construction Contract,

and if the Surety elects to act under Subparagraph 7.6.1, 7.6.2, or 7.6.3 above, 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. To the limit of the amount of this Bond, but subject to commitment by the Owner of the Balance of the Contract Price to mitigation of costs and damages on the Construction Contract, the Surety is obligated without duplication for:

- 7.8.1 The responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
 - 7.8.2 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 Paragraph 7.6; and
 - 7.8.3 Late delivery penalties or if penalties are not specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.
- 7.9 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, or successors.
- 7.10 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.
- 7.11 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 (2) years after Contractor Default or within two (2) years after the Contractor ceased working or within two (2) 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.
- 7.12 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page.
- 7.13 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. The intent is that this Bond shall be construed as a statutory bond and not as a common-law bond.
- 7.14 Definitions.
- 7.14.1 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.

7.14.2 Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.

7.14.3 Contractor Default: Failure of the Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Construction Contract.

7.14.4 Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

ARTICLE 8 Make the following changes:

Delete in its entirety.

Add the following Articles:

ARTICLE 9 MISCELLANEOUS REQUIREMENTS

9.1 Watchman

The employment of continuous watchman service to guard the property during any and all hours shall be at the discretion of the Contractor. However, the Contractor shall remove and restore all work or temporary structures damaged by fire, vandalism or similar acts at no extra cost to the Owner.

9.2 Overtime

The Contractor must include within their base price all overtime, nights, holidays and weekends as required to meet the Project Completion date.

9.3 Permits

The Contractor must obtain their own town and building permits at no additional charge to the Owner. City of Ansonia permits can be obtained from the City at a cost to the Contractor, including the State Education permit cost of \$0.26/\$1,000 value.

The City of Ansonia will not require special inspections for this project.

9.4 Supervision

The Contractor must provide full-time, properly qualified on-site supervision for the entire duration of the project, while workpersons are on site.

ARTICLE 10 BIDDERS REPRESENTATION

Each bidder shall fully acquaint himself with conditions as they exist, so that he fully understands the complexities and restrictions attending the execution of the Work included in the Proposal Documents. The failure to receive or examine any form, instrument, or document, or to visit the site to become acquainted with field conditions, shall in no way relieve the Bidder from any obligation with respect to the Bidder's proposal.

END OF SECTION

PROPOSER: _____
Name

Address

To: ANSONIA PUBLIC SCHOOLS
42 GROVE STREET
ANSONIA, CT 06401

Project: MAINTENANCE STORAGE GARAGE
20 PULASKI HIGHWAY
ANSONIA, CT 06401

In preparing this Proposal, we have carefully examined the Proposal Documents for this Project. We have visited the sites and noted the conditions affecting the Work.

The Proposal Documents referred to include Drawings and Project Manual dated March 6, 2020 for the above referenced projects, prepared by Donald W. Smith, Jr, PE and Silver/Petrucci + Associates, Inc., Hamden, Connecticut.

We propose to perform the work described in the Proposal Documents, in keeping with definitions of Article 1 of the Instructions to Proposers, for the Base Proposal Sum of:

BASE PROPOSAL:

For the entire project for the Total Cost of

\$ _____ Dollars (\$ _____ .00).
Written figure

We will commence work on _____ calendar days after receipt of "Notice to Proceed" or signing of Contract. We will be able to substantially complete the project within _____ calendar days thereafter (see SIB-1, 1.1.B).

Proposal Alternates:

The undersigned proposes to furnish all Labor, Materials, Equipment and Services necessary to construct the items listed in the Alternates described in Section 01030 for the stipulated sum of:

ALTERNATE A: Delete 12 Windows (See Section 01030.)

For the work, methods, procedures and materials (See Section 01030 and the Construction Documents), we propose to Deduct from the Base Proposal a total of

_____ Dollars (\$ _____ .00)
Written figure

The project schedule will be (added) (decreased) by _____ calendar days to complete the work indicated under Alternate A.

ALTERNATE B: Voluntary Alternate (See Section 01030.)

For the work, methods, procedures or materials referenced below, we propose to (Add/Deduct) from the Base Proposal a total of

\$ _____ Dollars (\$ _____ .00).
Written figure

The project schedule will be (added) (decreased) by _____ calendar days to complete the work indicated under Alternate B.

Voluntary Alternate Summary Description: _____

The Contractor __ will __ will not utilize the designated optional surplus material disposal area indicated on the site plans.

Unit Prices: (see Section 01019)

- 1. Bituminous Pavement with Compacted Granular Fill per BITUMINOUS PAVEMENT DETAIL on Drawing 1 including preparation of subgrade (material and labor) \$ _____ / square yard
- 2. Rock Excavation by Mechanical Means (incl disposal off site) \$ _____ / cubic yard
- 3. Trench Rock Excavation by Mechanical Means (incl disposal off site) \$ _____ /cubic yard

Allowances: (see allowances in Section 01019)

Design and Construction Allowance (included in the base proposal) \$ 5,000.00
(itemized as change orders per the specification, individually negotiated)

Schedule of Values: Submit with this Proposal a proposed schedule of values in accordance with Section 01019. This schedule of values is preliminary and can be adjusted and corrected at the time of award in accordance with Section 01019.

Addenda:

The undersigned acknowledges receipt of the following addenda to the Contract Documents, listed by number and date:

Number , Dated: _____

Number , Dated: _____

Number , Dated: _____

Number , Dated: _____

Date: _____

Name of Firm: _____

Address: _____

Signature: _____

Printed Name and
Title of Agent submitting Proposal: _____

Telephone Number: _____

Fax Number: _____

Email: _____

This Proposal may be withdrawn prior to the scheduled Proposal Opening or any postponement thereof.

DRAFT AIA® Document A141™ - 2014

Standard Form of Agreement Between Owner and Design-Builder

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)

« »
« »
« »
« »

and the Design-Builder:
(Name, legal status, address and other information)

« »
« »
« »
« »

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

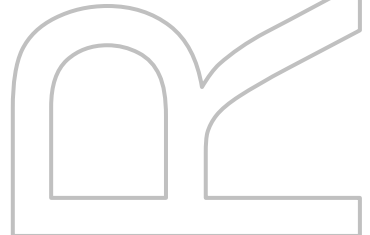
« »
« »
« »

The Owner and Design-Builder 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.

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

Consultation with an attorney is also encouraged with respect to professional licensing requirements in the jurisdiction where the Project is located.



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- 1 GENERAL PROVISIONS
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TABLE OF EXHIBITS

- A DESIGN-BUILD AMENDMENT
- B INSURANCE AND BONDS
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ARTICLE 1 GENERAL PROVISIONS

§ 1.1 Owner's Criteria

This Agreement is based on the Owner's Criteria set forth in this Section 1.1.

(Note the disposition for the following items by inserting the requested information or a statement such as "not applicable" or "unknown at time of execution." If the Owner intends to provide a set of design documents, and the requested information is contained in the design documents, identify the design documents and insert "see Owner's design documents" where appropriate.)

§ 1.1.1 The Owner's program for the Project:

(Set forth the program, identify documentation in which the program is set forth, or state the manner in which the program will be developed.)

« »

§ 1.1.2 The Owner's design requirements for the Project and related documentation:

(Identify below, or in an attached exhibit, the documentation that contains the Owner's design requirements, including any performance specifications for the Project.)

« »

§ 1.1.3 The Project's physical characteristics:

(Identify or describe, if appropriate, size, location, dimensions, or other pertinent information, such as geotechnical reports; site, boundary and topographic surveys; traffic and utility studies; availability of public and private utilities and services; legal description of the site; etc.)

« »

§ 1.1.4 The Owner's anticipated Sustainable Objective for the Project, if any:

(Identify the Owner's Sustainable Objective for the Project such as Sustainability Certification, benefit to the environment, enhancement to the health and well-being of building occupants, or improvement of energy efficiency. If the Owner identifies a Sustainable Objective, incorporate AIA Document A141™-2014, Exhibit C, Sustainable Projects, into this Agreement to define the terms, conditions and Work related to the Owner's Sustainable Objective.)

« »

§ 1.1.5 Incentive programs the Owner intends to pursue for the Project, including those related to the Sustainable Objective, and any deadlines for receiving the incentives that are dependent on, or related to, the Design-Builder's services, are as follows:

(Identify incentive programs the Owner intends to pursue for the Project and deadlines for submitting or applying for the incentive programs.)

« »

§ 1.1.6 The Owner's budget for the Work to be provided by the Design-Builder is set forth below:

(Provide total for Owner's budget, and if known, a line item breakdown of costs.)

« »

§ 1.1.7 The Owner's design and construction milestone dates:

.1 Design phase milestone dates:

« »

.2 Submission of Design-Builder Proposal:

« »

.3 Phased completion dates:

« »

.4 Substantial Completion date:

« »

.5 Other milestone dates:

« »

§ 1.1.8 The Owner requires the Design-Builder to retain the following Architect, Consultants and Contractors at the Design-Builder's cost:

(List name, legal status, address and other information.)

.1 Architect

« »

.2 Consultants

« »

.3 Contractors

« »

§ 1.1.9 Additional Owner's Criteria upon which the Agreement is based:

(Identify special characteristics or needs of the Project not identified elsewhere, such as historic preservation requirements.)

« »

§ 1.1.10 The Design-Builder shall confirm that the information included in the Owner's Criteria complies with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities.

§ 1.1.10.1 If the Owner's Criteria conflicts with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Design-Builder shall notify the Owner of the conflict.

§ 1.1.11 If there is a change in the Owner's Criteria, the Owner and the Design-Builder shall execute a Modification in accordance with Article 6.

§ 1.1.12 If the Owner and Design-Builder intend to transmit Instruments of Service or any other information or documentation in digital form, they shall endeavor to establish necessary protocols governing such transmissions. Unless otherwise agreed, the parties will use AIA Document E203™-2013 to establish the protocols for the development, use, transmission, and exchange of digital data and building information modeling.

§ 1.2 Project Team

§ 1.2.1 The Owner identifies the following representative in accordance with Section 7.1.1:

(List name, address and other information.)

« »

« »

« »

« »

« »

« »

§ 1.2.2 The persons or entities, in addition to the Owner's representative, who are required to review the Design-Builder's Submittals are as follows:

(List name, address and other information.)

« »

§ 1.2.3 The Owner will retain the following consultants and separate contractors:

(List discipline, scope of work, and, if known, identify by name and address.)

<< >>

§ 1.2.4 The Design-Builder identifies the following representative in accordance with Section 3.1.2:
(List name, address and other information.)

<< >>
<< >>
<< >>
<< >>
<< >>
<< >>

§ 1.2.5 Neither the Owner's nor the Design-Builder's representative shall be changed without ten days' written notice to the other party.

§ 1.3 Binding Dispute Resolution

For any Claim subject to, but not resolved by, mediation pursuant to Section 14.3, the method of binding dispute resolution shall be the following:

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

- Arbitration pursuant to Section 14.4
- Litigation in a court of competent jurisdiction
- Other: (Specify)
-

§ 1.4 Definitions

§ 1.4.1 Design-Build Documents. The Design-Build Documents consist of this Agreement between Owner and Design-Builder and its attached Exhibits (hereinafter, the "Agreement"); other documents listed in this Agreement; and Modifications issued after execution of this Agreement. A Modification is (1) a written amendment to the Contract signed by both parties, including the Design-Build Amendment, (2) a Change Order, or (3) a Change Directive.

§ 1.4.2 The Contract. The Design-Build Documents form the Contract. The Contract represents the entire and integrated agreement between the parties and supersedes prior negotiations, representations or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Design-Build Documents shall not be construed to create a contractual relationship of any kind between any persons or entities other than the Owner and the Design-Builder.

§ 1.4.3 The Work. The term "Work" means the design, construction and related services required to fulfill the Design-Builder's obligations under the Design-Build Documents, whether completed or partially completed, and includes all labor, materials, equipment and services provided or to be provided by the Design-Builder. The Work may constitute the whole or a part of the Project.

§ 1.4.4 The Project. The Project is the total design and construction of which the Work performed under the Design-Build Documents may be the whole or a part, and may include design and construction by the Owner and by separate contractors.

§ 1.4.5 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 Design-Builder, Contractor(s), Architect, and Consultant(s) under their respective agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, digital models and other similar materials.

§ 1.4.6 Submittal. A Submittal is any submission to the Owner for review and approval demonstrating how the Design-BUILDER proposes to conform to the Design-Build Documents for those portions of the Work for which the Design-Build Documents require Submittals. Submittals include, but are not limited to, shop drawings, product data, and samples. Submittals are not Design-Build Documents unless incorporated into a Modification.

§ 1.4.7 Owner. The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Design-Build Documents as if singular in number. The term “Owner” means the Owner or the Owner’s authorized representative.

§ 1.4.8 Design-BUILDER. The Design-BUILDER is the person or entity identified as such in the Agreement and is referred to throughout the Design-Build Documents as if singular in number. The term “Design-BUILDER” means the Design-BUILDER or the Design-BUILDER’s authorized representative.

§ 1.4.9 Consultant. A Consultant is a person or entity providing professional services for the Design-BUILDER for all or a portion of the Work, and is referred to throughout the Design-Build Documents as if singular in number. To the extent required by the relevant jurisdiction, the Consultant shall be lawfully licensed to provide the required professional services.

§ 1.4.10 Architect. The Architect is a person or entity providing design services for the Design-BUILDER for all or a portion of the Work, and is lawfully licensed to practice architecture in the applicable jurisdiction. The Architect is referred to throughout the Design-Build Documents as if singular in number.

§ 1.4.11 Contractor. A Contractor is a person or entity performing all or a portion of the construction, required in connection with the Work, for the Design-BUILDER. The Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Contractor is referred to throughout the Design-Build Documents as if singular in number and means a Contractor or an authorized representative of the Contractor.

§ 1.4.12 Confidential Information. Confidential Information is information containing confidential or business proprietary information that is clearly marked as “confidential.”

§ 1.4.13 Contract Time. Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, as set forth in the Design-Build Amendment for Substantial Completion of the Work.

§ 1.4.14 Day. The term “day” as used in the Design-Build Documents shall mean calendar day unless otherwise specifically defined.

§ 1.4.15 Contract Sum. The Contract Sum is the amount to be paid to the Design-BUILDER for performance of the Work after execution of the Design-Build Amendment, as identified in Article A.1 of the Design-Build Amendment.

ARTICLE 2 COMPENSATION AND PROGRESS PAYMENTS

§ 2.1 Compensation for Work Performed Prior To Execution of Design-Build Amendment

§ 2.1.1 Unless otherwise agreed, payments for Work performed prior to Execution of the Design-Build Amendment shall be made monthly. For the Design-BUILDER’s performance of Work prior to the execution of the Design-Build Amendment, the Owner shall compensate the Design-BUILDER as follows:

(Insert amount of, or basis for, compensation, including compensation for any Sustainability Services, or indicate the exhibit in which the information is provided. If there will be a limit on the total amount of compensation for Work performed prior to the execution of the Design-Build Amendment, state the amount of the limit.)

« »

§ 2.1.2 The hourly billing rates for services of the Design-BUILDER and the Design-BUILDER’s Architect, Consultants and Contractors, if any, are set forth below.

(If applicable, attach an exhibit of hourly billing rates or insert them below.)

« »

§ 2.1.3 Compensation for Reimbursable Expenses Prior To Execution of Design-Build Amendment

§ 2.1.3.1 Reimbursable Expenses are in addition to compensation set forth in Section 2.1.1 and 2.1.2 and include expenses, directly related to the Project, incurred by the Design-Builder and the Design-Builder's Architect, Consultants, and Contractors, as follows:

- .1 Transportation and authorized out-of-town travel and subsistence;
- .2 Dedicated data and communication services, teleconferences, Project web sites, and extranets;
- .3 Fees paid for securing approval of authorities having jurisdiction over the Project;
- .4 Printing, reproductions, plots, standard form documents;
- .5 Postage, handling and delivery;
- .6 Expense of overtime work requiring higher than regular rates, if authorized in advance by the Owner;
- .7 Renderings, physical models, mock-ups, professional photography, and presentation materials requested by the Owner;
- .8 All taxes levied on professional services and on reimbursable expenses; and
- .9 Other Project-related expenditures, if authorized in advance by the Owner.

§ 2.1.3.2 For Reimbursable Expenses, the compensation shall be the expenses the Design-Builder and the Design-Builder's Architect, Consultants and Contractors incurred, plus an administrative fee of <> percent (<> %) of the expenses incurred.

§ 2.1.4 Payments to the Design-Builder Prior To Execution of Design-Build Amendment

§ 2.1.4.1 Payments are due and payable upon presentation of the Design-Builder's invoice. Amounts unpaid <> (<>) days after the invoice date shall bear interest at the rate entered below, or in the absence thereof at the legal rate prevailing from time to time at the principal place of business of the Design-Builder.
(Insert rate of monthly or annual interest agreed upon.)

<> % <>

§ 2.1.4.2 Records of Reimbursable Expenses and services performed on the basis of hourly rates shall be available to the Owner at mutually convenient times for a period of two years following execution of the Design-Build Amendment or termination of this Agreement, whichever occurs first.

§ 2.2 Contract Sum and Payment for Work Performed After Execution of Design-Build Amendment

For the Design-Builder's performance of the Work after execution of the Design-Build Amendment, the Owner shall pay to the Design-Builder the Contract Sum in current funds as agreed in the Design-Build Amendment.

ARTICLE 3 GENERAL REQUIREMENTS OF THE WORK OF THE DESIGN-BUILD CONTRACT**§ 3.1 General**

§ 3.1.1 The Design-Builder shall comply with any applicable licensing requirements in the jurisdiction where the Project is located.

§ 3.1.2 The Design-Builder shall designate in writing a representative who is authorized to act on the Design-Builder's behalf with respect to the Project.

§ 3.1.3 The Design-Builder shall perform the Work in accordance with the Design-Build Documents. The Design-Builder shall not be relieved of the obligation to perform the Work in accordance with the Design-Build Documents by the activities, tests, inspections or approvals of the Owner.

§ 3.1.3.1 The Design-Builder shall perform the Work in compliance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities. If the Design-Builder performs Work contrary to applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities, the Design-Builder shall assume responsibility for such Work and shall bear the costs attributable to correction.

§ 3.1.3.2 Neither the Design-Builder nor any Contractor, Consultant, or Architect shall be obligated to perform any act which they believe will violate any applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities. If the Design-Builder determines that implementation of any instruction received from the

Owner, including those in the Owner's Criteria, would cause a violation of any applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Design-Builder shall notify the Owner in writing. Upon verification by the Owner that a change to the Owner's Criteria is required to remedy the violation, the Owner and the Design-Builder shall execute a Modification in accordance with Article 6.

§ 3.1.4 The Design-Builder shall be responsible to the Owner for acts and omissions of the Design-Builder's employees, Architect, Consultants, Contractors, and their agents and employees, and other persons or entities performing portions of the Work.

§ 3.1.5 General Consultation. The Design-Builder shall schedule and conduct periodic meetings with the Owner to review matters such as procedures, progress, coordination, and scheduling of the Work.

§ 3.1.6 When applicable law requires that services be performed by licensed professionals, the Design-Builder shall provide those services through qualified, licensed professionals. The Owner understands and agrees that the services of the Design-Builder's Architect and the Design-Builder's other Consultants are performed in the sole interest of, and for the exclusive benefit of, the Design-Builder.

§ 3.1.7 The Design-Builder, with the assistance of the Owner, shall prepare and file documents required to obtain necessary approvals of governmental authorities having jurisdiction over the Project.

§ 3.1.8 Progress Reports

§ 3.1.8.1 The Design-Builder shall keep the Owner informed of the progress and quality of the Work. On a monthly basis, or otherwise as agreed to by the Owner and Design-Builder, the Design-Builder shall submit written progress reports to the Owner, showing estimated percentages of completion and other information identified below:

- .1 Work completed for the period;
- .2 Project schedule status;
- .3 Submittal schedule and status report, including a summary of outstanding Submittals;
- .4 Responses to requests for information to be provided by the Owner;
- .5 Approved Change Orders and Change Directives;
- .6 Pending Change Order and Change Directive status reports;
- .7 Tests and inspection reports;
- .8 Status report of Work rejected by the Owner;
- .9 Status of Claims previously submitted in accordance with Article 14;
- .10 Cumulative total of the Cost of the Work to date including the Design-Builder's compensation and Reimbursable Expenses, if any;
- .11 Current Project cash-flow and forecast reports; and
- .12 Additional information as agreed to by the Owner and Design-Builder.

§ 3.1.8.2 In addition, where the Contract Sum is the Cost of the Work with or without a Guaranteed Maximum Price, the Design-Builder shall include the following additional information in its progress reports:

- .1 Design-Builder's work force report;
- .2 Equipment utilization report; and
- .3 Cost summary, comparing actual costs to updated cost estimates.

§ 3.1.9 Design-Builder's Schedules

§ 3.1.9.1 The Design-Builder, promptly after execution of this Agreement, shall prepare and submit for the Owner's information a schedule for the Work. The schedule, including the time required for design and construction, shall not exceed time limits current under the Design-Build Documents, shall be revised at appropriate intervals as required by the conditions of the Work and Project, shall be related to the entire Project to the extent required by the Design-Build Documents, shall provide for expeditious and practicable execution of the Work, and shall include allowances for periods of time required for the Owner's review and for approval of submissions by authorities having jurisdiction over the Project.

§ 3.1.9.2 The Design-Builder shall perform the Work in general accordance with the most recent schedules submitted to the Owner.

§ 3.1.10 Certifications. Upon the Owner's written request, the Design-Builder shall obtain from the Architect, Consultants, and Contractors, and furnish to the Owner, certifications with respect to the documents and services

provided by the Architect, Consultants, and Contractors (a) that, to the best of their knowledge, information and belief, the documents or services to which the certifications relate (i) are consistent with the Design-Build Documents, except to the extent specifically identified in the certificate, and (ii) comply with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities governing the design of the Project; and (b) that the Owner and its consultants shall be entitled to rely upon the accuracy of the representations and statements contained in the certifications. The Design-Builder's Architect, Consultants, and Contractors shall not be required to execute certificates or consents that would require knowledge, services or responsibilities beyond the scope of their services.

§ 3.1.11 Design-Builder's Submittals

§ 3.1.11.1 Prior to submission of any Submittals, the Design-Builder shall prepare a Submittal schedule, and shall submit the schedule for the Owner's approval. The Owner's approval shall not unreasonably be delayed or withheld. The Submittal schedule shall (1) be coordinated with the Design-Builder's schedule provided in Section 3.1.9.1, (2) allow the Owner reasonable time to review Submittals, and (3) be periodically updated to reflect the progress of the Work. If the Design-Builder fails to submit a Submittal schedule, the Design-Builder shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of Submittals.

§ 3.1.11.2 By providing Submittals the Design-Builder represents to the Owner that it 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 Design-Build Documents.

§ 3.1.11.3 The Design-Builder shall perform no portion of the Work for which the Design-Build Documents require Submittals until the Owner has approved the respective Submittal.

§ 3.1.11.4 The Work shall be in accordance with approved Submittals except that the Design-Builder shall not be relieved of its responsibility to perform the Work consistent with the requirements of the Design-Build Documents. The Work may deviate from the Design-Build Documents only if the Design-Builder has notified the Owner in writing of a deviation from the Design-Build Documents at the time of the Submittal and a Modification is executed authorizing the identified deviation. The Design-Builder shall not be relieved of responsibility for errors or omissions in Submittals by the Owner's approval of the Submittals.

§ 3.1.11.5 All professional design services or certifications to be provided by the Design-Builder, including all drawings, calculations, specifications, certifications, shop drawings and other Submittals, shall contain the signature and seal of the licensed design professional preparing them. Submittals related to the Work designed or certified by the licensed design professionals, if prepared by others, shall bear the licensed design professional's written approval. The Owner and its consultants shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals.

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

§ 3.1.13 Royalties, Patents and Copyrights

§ 3.1.13.1 The Design-Builder shall pay all royalties and license fees.

§ 3.1.13.2 The Design-Builder shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner and its separate contractors and consultants harmless from loss on account thereof, but shall not be responsible for such defense or loss when a particular design, process or product of a particular manufacturer or manufacturers is required by the Owner, or where the copyright violations are required in the Owner's Criteria. However, if the Design-Builder has reason to believe that the design, process or product required in the Owner's Criteria is an infringement of a copyright or a patent, the Design-Builder shall be responsible for such loss unless such information is promptly furnished to the Owner. If the Owner receives notice from a patent or copyright owner of an

alleged violation of a patent or copyright, attributable to the Design-Builder, the Owner shall give prompt written notice to the Design-Builder.

§ 3.1.14 Indemnification

§ 3.1.14.1 To the fullest extent permitted by law, the Design-Builder shall indemnify and hold harmless the Owner, including the Owner's agents and employees, 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, but only to the extent caused by the negligent acts or omissions of the Design-Builder, Architect, a Consultant, a Contractor, or anyone directly or indirectly employed by them or anyone for whose acts they may be liable. 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 3.1.14.

§ 3.1.14.2 The indemnification obligation under this Section 3.1.14 shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for Design-Builder, Architect, a Consultant, a Contractor, or anyone directly or indirectly employed by them, under workers' compensation acts, disability benefit acts or other employee benefit acts.

§ 3.1.15 Contingent Assignment of Agreements

§ 3.1.15.1 Each agreement for a portion of the Work is assigned by the Design-Builder to the Owner, provided that

- .1 assignment is effective only after termination of the Contract by the Owner for cause, pursuant to Sections 13.1.4 or 13.2.2, and only for those agreements that the Owner accepts by written notification to the Design-Builder and the Architect, Consultants, and Contractors whose agreements are accepted for assignment; 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 an agreement, the Owner assumes the Design-Builder's rights and obligations under the agreement.

§ 3.1.15.2 Upon such assignment, if the Work has been suspended for more than 30 days, the compensation under the assigned agreement shall be equitably adjusted for increases in cost resulting from the suspension.

§ 3.1.15.3 Upon such assignment to the Owner under this Section 3.1.15, the Owner may further assign the agreement to a successor design-builder or other entity. If the Owner assigns the agreement to a successor design-builder or other entity, the Owner shall nevertheless remain legally responsible for all of the successor design-builder's or other entity's obligations under the agreement.

§ 3.1.16 Design-Builder's Insurance and Bonds. The Design-Builder shall purchase and maintain insurance and provide bonds as set forth in Exhibit B.

ARTICLE 4 WORK PRIOR TO EXECUTION OF THE DESIGN-BUILD AMENDMENT

§ 4.1 General

§ 4.1.1 Any information submitted by the Design-Builder, and any interim decisions made by the Owner, shall be for the purpose of facilitating the design process and shall not modify the Owner's Criteria unless the Owner and Design-Builder execute a Modification.

§ 4.1.2 The Design-Builder shall advise the Owner on proposed site use and improvements, selection of materials, and building systems and equipment. The Design-Builder shall also provide the Owner with recommendations, consistent with the Owner's Criteria, on constructability; availability of materials and labor; time requirements for procurement, installation and construction; and factors related to construction cost including, but not limited to, costs of alternative designs or materials, preliminary budgets, life-cycle data, and possible cost reductions.

§ 4.2 Evaluation of the Owner's Criteria

§ 4.2.1 The Design-Builder shall schedule and conduct meetings with the Owner and any other necessary individuals or entities to discuss and review the Owner's Criteria as set forth in Section 1.1. The Design-Builder shall thereafter again meet with the Owner to discuss a preliminary evaluation of the Owner's Criteria. The preliminary evaluation shall address possible alternative approaches to design and construction of the Project and include the Design-Builder's recommendations, if any, with regard to accelerated or fast-track scheduling, procurement, or

phased construction. The preliminary evaluation shall consider cost information, constructability, and procurement and construction scheduling issues.

§ 4.2.2 After the Design-Builder meets with the Owner and presents the preliminary evaluation, the Design-Builder shall provide a written report to the Owner, summarizing the Design-Builder's evaluation of the Owner's Criteria. The report shall also include

- .1 allocations of program functions, detailing each function and their square foot areas;
- .2 a preliminary estimate of the Cost of the Work, and, if necessary, recommendations to adjust the Owner's Criteria to conform to the Owner's budget;
- .3 a preliminary schedule, which shall include proposed design milestones; dates for receiving additional information from, or for work to be completed by, the Owner; anticipated date for the Design-Builder's Proposal; and dates of periodic design review sessions with the Owner; and
- .4 the following:
(List additional information, if any, to be included in the Design-Builder's written report.)

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§ 4.2.3 The Owner shall review the Design-Builder's written report and, if acceptable, provide the Design-Builder with written consent to proceed to the development of the Preliminary Design as described in Section 4.3. The consent to proceed shall not be understood to modify the Owner's Criteria unless the Owner and Design-Builder execute a Modification.

§ 4.3 Preliminary Design

§ 4.3.1 Upon the Owner's issuance of a written consent to proceed under Section 4.2.3, the Design-Builder shall prepare and submit a Preliminary Design to the Owner. The Preliminary Design shall include a report identifying any deviations from the Owner's Criteria, and shall include the following:

- .1 Confirmation of the allocations of program functions;
- .2 Site plan;
- .3 Building plans, sections and elevations;
- .4 Structural system;
- .5 Selections of major building systems, including but not limited to mechanical, electrical and plumbing systems; and
- .6 Outline specifications or sufficient drawing notes describing construction materials.

The Preliminary Design may include some combination of physical study models, perspective sketches, or digital modeling.

§ 4.3.2 The Owner shall review the Preliminary Design and, if acceptable, provide the Design-Builder with written consent to proceed to development of the Design-Builder's Proposal. The Preliminary Design shall not modify the Owner's Criteria unless the Owner and Design-Builder execute a Modification.

§ 4.4 Design-Builder's Proposal

§ 4.4.1 Upon the Owner's issuance of a written consent to proceed under Section 4.3.2, the Design-Builder shall prepare and submit the Design-Builder's Proposal to the Owner. The Design-Builder's Proposal shall include the following:

- .1 A list of the Preliminary Design documents and other information, including the Design-Builder's clarifications, assumptions and deviations from the Owner's Criteria, upon which the Design-Builder's Proposal is based;
- .2 The proposed Contract Sum, including the compensation method and, if based upon the Cost of the Work plus a fee, a written statement of estimated cost organized by trade categories, allowances, contingencies, Design-Builder's Fee, and other items that comprise the Contract Sum;
- .3 The proposed date the Design-Builder shall achieve Substantial Completion;
- .4 An enumeration of any qualifications and exclusions, if applicable;
- .5 A list of the Design-Builder's key personnel, Contractors and suppliers; and
- .6 The date on which the Design-Builder's Proposal expires.

§ 4.4.2 Submission of the Design-Builder's Proposal shall constitute a representation by the Design-Builder that it has visited the site and become familiar with local conditions under which the Work is to be completed.

§ 4.4.3 If the Owner and Design-Builder agree on a proposal, the Owner and Design-Builder shall execute the Design-Build Amendment setting forth the terms of their agreement.

ARTICLE 5 WORK FOLLOWING EXECUTION OF THE DESIGN-BUILD AMENDMENT

§ 5.1 Construction Documents

§ 5.1.1 Upon the execution of the Design-Build Amendment, the Design-Builder shall prepare Construction Documents. The Construction Documents shall establish the quality levels of materials and systems required. The Construction Documents shall be consistent with the Design-Build Documents.

§ 5.1.2 The Design-Builder shall provide the Construction Documents to the Owner for the Owner's information. If the Owner discovers any deviations between the Construction Documents and the Design-Build Documents, the Owner shall promptly notify the Design-Builder of such deviations in writing. The Construction Documents shall not modify the Design-Build Documents unless the Owner and Design-Builder execute a Modification. The failure of the Owner to discover any such deviations shall not relieve the Design-Builder of the obligation to perform the Work in accordance with the Design-Build Documents.

§ 5.2 Construction

§ 5.2.1 **Commencement.** Except as permitted in Section 5.2.2, construction shall not commence prior to execution of the Design-Build Amendment.

§ 5.2.2 If the Owner and Design-Builder agree in writing, construction may proceed prior to the execution of the Design-Build Amendment. However, such authorization shall not waive the Owner's right to reject the Design-Builder's Proposal.

§ 5.2.3 The Design-Builder shall supervise and direct the Work, using the Design-Builder's best skill and attention. The Design-Builder shall be solely responsible for, and have control over, construction means, methods, techniques, sequences and procedures, and for coordinating all portions of the Work under the Contract, unless the Design-Build Documents give other specific instructions concerning these matters.

§ 5.2.4 The Design-Builder shall be responsible for inspection of portions of Work already performed to determine that such portions are in proper condition to receive subsequent Work.

§ 5.3 Labor and Materials

§ 5.3.1 Unless otherwise provided in the Design-Build Documents, the Design-Builder 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.

§ 5.3.2 When a material or system is specified in the Design-Build Documents, the Design-Builder may make substitutions only in accordance with Article 6.

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

§ 5.4 Taxes

The Design-Builder shall pay sales, consumer, use and similar taxes, for the Work provided by the Design-Builder, that are legally enacted when the Design-Build Amendment is executed, whether or not yet effective or merely scheduled to go into effect.

§ 5.5 Permits, Fees, Notices and Compliance with Laws

§ 5.5.1 Unless otherwise provided in the Design-Build Documents, the Design-Builder shall secure and pay for the building permit as well as any other permits, fees, licenses, and inspections by government agencies, necessary for proper execution of the Work and Substantial Completion of the Project.

§ 5.5.2 The Design-Builder 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.

§ 5.5.3 Concealed or Unknown Conditions. If the Design-Builder encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Design-Build 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 Design-Build Documents, the Design-Builder shall promptly provide notice to the Owner before conditions are disturbed and in no event later than 21 days after first observance of the conditions. The Owner shall promptly investigate such conditions and, if the Owner determines that they differ materially and cause an increase or decrease in the Design-Builder's cost of, or time required for, performance of any part of the Work, shall recommend an equitable adjustment in the Contract Sum or Contract Time, or both. If the Owner determines that the conditions at the site are not materially different from those indicated in the Design-Build Documents and that no change in the terms of the Contract is justified, the Owner shall promptly notify the Design-Builder in writing, stating the reasons. If the Design-Builder disputes the Owner's determination or recommendation, the Design-Builder may proceed as provided in Article 14.

§ 5.5.4 If, in the course of the Work, the Design-Builder encounters human remains, or recognizes the existence of burial markers, archaeological sites, or wetlands, not indicated in the Design-Build Documents, the Design-Builder shall immediately suspend any operations that would affect them and shall notify the Owner. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Design-Builder 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 14.

§ 5.6 Allowances

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

§ 5.6.2 Unless otherwise provided in the Design-Build Documents,

- .1 allowances shall cover the cost to the Design-Builder of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- .2 the Design-Builder'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 5.6.2.1 and (2) changes in Design-Builder's costs under Section 5.6.2.2.

§ 5.6.3 The Owner shall make selections of materials and equipment with reasonable promptness for allowances requiring Owner selection.

§ 5.7 Key Personnel, Contractors and Suppliers

§ 5.7.1 The Design-Builder shall not employ personnel, or contract with Contractors or suppliers to whom the Owner has made reasonable and timely objection. The Design-Builder shall not be required to contract with anyone to whom the Design-Builder has made reasonable and timely objection.

§ 5.7.2 If the Design-Builder changes any of the personnel, Contractors or suppliers identified in the Design-Build Amendment, the Design-Builder shall notify the Owner and provide the name and qualifications of the new personnel, Contractor or supplier. The Owner may reply within 14 days to the Design-Builder in writing, stating (1) whether the Owner has reasonable objection to the proposed personnel, Contractor or supplier or (2) that the Owner requires additional time to review. Failure of the Owner to reply within the 14-day period shall constitute notice of no reasonable objection.

§ 5.7.3 Except for those persons or entities already identified or required in the Design-Build Amendment, the Design-Builder, as soon as practicable after execution of the Design-Build Amendment, shall furnish in writing to the

Owner the names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each principal portion of the Work. The Owner may reply within 14 days to the Design-Builder in writing stating (1) whether the Owner has reasonable objection to any such proposed person or entity or (2) that the Owner requires additional time for review. Failure of the Owner to reply within the 14-day period shall constitute notice of no reasonable objection.

§ 5.7.3.1 If the Owner has reasonable objection to a person or entity proposed by the Design-Builder, the Design-Builder shall propose another to whom the Owner has no reasonable objection. If the rejected person or entity 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 person or entity's Work. However, no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Design-Builder has acted promptly and responsively in submitting names as required.

§ 5.8 Documents and Submittals at the Site

The Design-Builder shall maintain at the site for the Owner one copy of the Design-Build Documents and a current set of the Construction Documents, in good order and marked currently to indicate field changes and selections made during construction, and one copy of approved Submittals. The Design-Builder shall deliver these items to the Owner in accordance with Section 9.10.2 as a record of the Work as constructed.

§ 5.9 Use of Site

The Design-Builder 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 Design-Build Documents, and shall not unreasonably encumber the site with materials or equipment.

§ 5.10 Cutting and Patching

The Design-Builder shall not cut, patch or otherwise alter fully or partially completed construction by the Owner or a separate contractor except with written consent of the Owner and of such separate contractor; such consent shall not be unreasonably withheld. The Design-Builder shall not unreasonably withhold from the Owner or a separate contractor the Design-Builder's consent to cutting or otherwise altering the Work.

§ 5.11 Cleaning Up

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

§ 5.11.2 If the Design-Builder fails to clean up as provided in the Design-Build Documents, the Owner may do so and Owner shall be entitled to reimbursement from the Design-Builder.

§ 5.12 Access to Work

The Design-Builder shall provide the Owner and its separate contractors and consultants access to the Work in preparation and progress wherever located. The Design-Builder shall notify the Owner regarding Project safety criteria and programs, which the Owner, and its contractors and consultants, shall comply with while at the site.

§ 5.13 Construction by Owner or by Separate Contractors

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

§ 5.13.1.1 The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces; and to award separate contracts in connection with other portions of the Project, or other construction or operations on the site, under terms and conditions identical or substantially similar to this Contract, including those terms and conditions related to insurance and waiver of subrogation. The Owner shall notify the Design-Builder promptly after execution of any separate contract. If the Design-Builder claims that delay or additional cost is involved because of such action by the Owner, the Design-Builder shall make a Claim as provided in Article 14.

§ 5.13.1.2 When separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term "Design-Builder" in the Design-Build Documents in each case shall mean the individual or entity that executes each separate agreement with the Owner.

§ 5.13.1.3 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 Design-Builder, who shall cooperate with them. The Design-Builder shall participate with other separate contractors and the Owner in reviewing their construction schedules. The Design-Builder shall make any revisions to the construction schedule deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Design-Builder, separate contractors and the Owner until subsequently revised.

§ 5.13.1.4 Unless otherwise provided in the Design-Build Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces or separate contractors, the Owner shall be deemed to be subject to the same obligations, and to have the same rights, that apply to the Design-Builder under the Contract.

§ 5.14 Mutual Responsibility

§ 5.14.1 The Design-Builder 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 Design-Builder's construction and operations with theirs as required by the Design-Build Documents.

§ 5.14.2 If part of the Design-Builder's Work depends upon construction or operations by the Owner or a separate contractor, the Design-Builder shall, prior to proceeding with that portion of the Work, prepare a written report to the Owner, identifying 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 Design-Builder's Work. Failure of the Design-Builder to report shall constitute an acknowledgment that the Owner's or separate contractor's completed or partially completed construction is fit and proper to receive the Design-Builder's Work, except as to defects not then reasonably discoverable.

§ 5.14.3 The Design-Builder shall reimburse the Owner for costs the Owner incurs that are payable to a separate contractor because of the Design-Builder's delays, improperly timed activities or defective construction. The Owner shall be responsible to the Design-Builder for costs the Design-Builder incurs because of a separate contractor's delays, improperly timed activities, damage to the Work or defective construction.

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

§ 5.14.5 The Owner and each separate contractor shall have the same responsibilities for cutting and patching the Work as the Design-Builder has with respect to the construction of the Owner or separate contractors in Section 5.10.

§ 5.15 Owner's Right to Clean Up

If a dispute arises among the Design-Builder, 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 will allocate the cost among those responsible.

ARTICLE 6 CHANGES IN THE WORK

§ 6.1 General

§ 6.1.1 Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order or Change Directive, subject to the limitations stated in this Article 6 and elsewhere in the Design-Build Documents.

§ 6.1.2 A Change Order shall be based upon agreement between the Owner and Design-Builder. The Owner may issue a Change Directive without agreement by the Design-Builder.

§ 6.1.3 Changes in the Work shall be performed under applicable provisions of the Design-Build Documents, and the Design-Builder shall proceed promptly, unless otherwise provided in the Change Order or Change Directive.

§ 6.2 Change Orders

A Change Order is a written instrument signed by the Owner and Design-Builder 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 or, if prior to execution of the Design-Build Amendment, the adjustment in the Design-Builder's compensation; and

- .3 The extent of the adjustment, if any, in the Contract Time.

§ 6.3 Change Directives

§ 6.3.1 A Change Directive is a written order signed by the Owner directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or, if prior to execution of the Design-Build Amendment, the adjustment in the Design-Builder's compensation, or Contract Time. The Owner may by 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 or, if prior to execution of the Design-Build Amendment, the adjustment in the Design-Builder's compensation, and Contract Time being adjusted accordingly.

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

§ 6.3.3 If the Change Directive provides for an adjustment to the Contract Sum or, if prior to execution of the Design-Build Amendment, an adjustment in the Design-Builder's compensation, 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 Design-Build 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 6.3.7.

§ 6.3.4 If unit prices are stated in the Design-Build Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed in a proposed Change Order or Change Directive so that application of such unit prices to quantities of Work proposed will cause substantial inequity to the Owner or Design-Builder, the applicable unit prices shall be equitably adjusted.

§ 6.3.5 Upon receipt of a Change Directive, the Design-Builder shall promptly proceed with the change in the Work involved and advise the Owner of the Design-Builder's agreement or disagreement with the method, if any, provided in the Change Directive for determining the proposed adjustment in the Contract Sum or, if prior to execution of the Design-Build Amendment, the adjustment in the Design-Builder's compensation, or Contract Time.

§ 6.3.6 A Change Directive signed by the Design-Builder indicates the Design-Builder's agreement therewith, including adjustment in Contract Sum or, if prior to execution of the Design-Build Amendment, the adjustment in the Design-Builder's compensation, and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

§ 6.3.7 If the Design-Builder does not respond promptly or disagrees with the method for adjustment in the Contract Sum or, if prior to execution of the Design-Build Amendment, the method for adjustment in the Design-Builder's compensation, the Owner shall determine the method and the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase, 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 6.3.3.3, the Design-Builder shall keep and present, in such form as the Owner may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Design-Build Documents, costs for the purposes of this Section 6.3.7 shall be limited to the following:

- .1 Additional costs of professional services;
- .2 Costs of labor, including social security, unemployment insurance, fringe benefits required by agreement or custom, and workers' compensation insurance;
- .3 Costs of materials, supplies and equipment, including cost of transportation, whether incorporated or consumed;
- .4 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Design-Builder or others;
- .5 Costs of premiums for all bonds and insurance, permit fees, and sales, use or similar taxes related to the Work; and
- .6 Additional costs of supervision and field office personnel directly attributable to the change.

§ 6.3.8 The amount of credit to be allowed by the Design-Builder to the Owner for a deletion or change that results in a net decrease in the Contract Sum or, if prior to execution of the Design-Build Amendment, in the Design-Builder's

compensation, shall be actual net cost. 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.

§ 6.3.9 Pending final determination of the total cost of a Change Directive to the Owner, the Design-Builder may request payment for Work completed under the Change Directive in Applications for Payment. The Owner will make an interim determination for purposes of certification for payment for those costs deemed to be reasonably justified. The Owner's interim determination of cost shall adjust the Contract Sum or, if prior to execution of the Design-Build Amendment, the Design-Builder's compensation, on the same basis as a Change Order, subject to the right of Design-Builder to disagree and assert a Claim in accordance with Article 14.

§ 6.3.10 When the Owner and Design-Builder agree with a determination concerning the adjustments in the Contract Sum or, if prior to execution of the Design-Build Amendment, the adjustment in the Design-Builder's compensation and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and the Owner and Design-Builder shall execute a Change Order. Change Orders may be issued for all or any part of a Change Directive.

ARTICLE 7 OWNER'S RESPONSIBILITIES

§ 7.1 General

§ 7.1.1 The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all Project matters requiring the Owner's approval or authorization.

§ 7.1.2 The Owner shall render decisions in a timely manner and in accordance with the Design-Builder's schedule agreed to by the Owner. The Owner shall furnish to the Design-Builder, within 15 days after receipt of a written request, information necessary and relevant for the Design-Builder 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.

§ 7.2 Information and Services Required of the Owner

§ 7.2.1 The Owner shall furnish information or services required of the Owner by the Design-Build Documents with reasonable promptness.

§ 7.2.2 The Owner shall provide, to the extent under the Owner's control and if not required by the Design-Build Documents to be provided by the Design-Builder, the results and reports of prior tests, inspections or investigations conducted for the Project involving structural or mechanical systems; chemical, air and water pollution; hazardous materials; or environmental and subsurface conditions and information regarding the presence of pollutants at the Project site. Upon receipt of a written request from the Design-Builder, the Owner shall also provide surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site under the Owner's control.

§ 7.2.3 The Owner shall promptly obtain easements, zoning variances, and legal authorizations or entitlements regarding site utilization where essential to the execution of the Project.

§ 7.2.4 The Owner shall cooperate with the Design-Builder in securing building and other permits, licenses and inspections.

§ 7.2.5 The services, information, surveys and reports required to be provided by the Owner under this Agreement, shall be furnished at the Owner's expense, and except as otherwise specifically provided in this Agreement or elsewhere in the Design-Build Documents or to the extent the Owner advises the Design-Builder to the contrary in writing, the Design-Builder shall be entitled to rely upon the accuracy and completeness thereof. In no event shall the Design-Builder be relieved of its responsibility to exercise proper precautions relating to the safe performance of the Work.

§ 7.2.6 If the Owner observes or otherwise becomes aware of a fault or defect in the Work or non-conformity with the Design-Build Documents, the Owner shall give prompt written notice thereof to the Design-Builder.

§ 7.2.7 Prior to the execution of the Design-Build Amendment, the Design-Builder may request in writing that the Owner provide reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations

under the Design-Build Documents and the Design-Builder's Proposal. Thereafter, the Design-Builder may only request such evidence if (1) the Owner fails to make payments to the Design-Builder as the Design-Build Documents require; (2) a change in the Work materially changes the Contract Sum; or (3) the Design-Builder identifies in writing a reasonable concern regarding the Owner's ability to make payment when due. The Owner shall furnish such evidence as a condition precedent to commencement or continuation of the Work or the portion of the Work affected by a material change. After the Owner furnishes the evidence, the Owner shall not materially vary such financial arrangements without prior notice to the Design-Builder.

§ 7.2.8 Except as otherwise provided in the Design-Build Documents or when direct communications have been specially authorized, the Owner shall communicate through the Design-Builder with persons or entities employed or retained by the Design-Builder.

§ 7.2.9 Unless required by the Design-Build Documents to be provided by the Design-Builder, the Owner shall, upon request from the Design-Builder, furnish the services of geotechnical engineers or other consultants for investigation of subsurface, air and water conditions when such services are reasonably necessary to properly carry out the design services furnished by the Design-Builder. In such event, the Design-Builder shall specify the services required. Such services may include, but are not limited to, test borings, test pits, determinations of soil bearing values, percolation tests, evaluations of hazardous materials, ground corrosion and resistivity tests, and necessary operations for anticipating subsoil conditions. The services of geotechnical engineer(s) or other consultants shall include preparation and submission of all appropriate reports and professional recommendations.

§ 7.2.10 The Owner shall purchase and maintain insurance as set forth in Exhibit B.

§ 7.3 Submittals

§ 7.3.1 The Owner shall review and approve or take other appropriate action on Submittals. Review of 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; or for determining that the Submittals are in conformance with the Design-Build Documents, all of which remain the responsibility of the Design-Builder as required by the Design-Build Documents. The Owner's action will be taken in accordance with the submittal schedule approved by the Owner or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Owner's judgment to permit adequate review. The Owner's review of Submittals shall not relieve the Design-Builder of the obligations under Sections 3.1.11, 3.1.12, and 5.2.3. The Owner's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Owner, of any construction means, methods, techniques, sequences or procedures. The Owner's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

§ 7.3.2 Upon review of the Submittals required by the Design-Build Documents, the Owner shall notify the Design-Builder of any non-conformance with the Design-Build Documents the Owner discovers.

§ 7.4 Visits to the site by the Owner shall not be construed to create an obligation on the part of the Owner to make on-site inspections to check the quality or quantity of the Work. The Owner shall neither have control over or charge of, nor be responsible for, the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, because these are solely the Design-Builder's rights and responsibilities under the Design-Build Documents.

§ 7.5 The Owner shall not be responsible for the Design-Builder's failure to perform the Work in accordance with the requirements of the Design-Build Documents. The Owner shall not have control over or charge of, and will not be responsible for acts or omissions of the Design-Builder, Architect, Consultants, Contractors, or their agents or employees, or any other persons or entities performing portions of the Work for the Design-Builder.

§ 7.6 The Owner has the authority to reject Work that does not conform to the Design-Build Documents. The Owner shall have authority to require inspection or testing of the Work in accordance with Section 15.5.2, whether or not such Work is fabricated, installed or completed. However, neither this authority of the Owner nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Owner to the Design-Builder, the Architect, Consultants, Contractors, material and equipment suppliers, their agents or employees, or other persons or entities performing portions of the Work.

§ 7.7 The Owner shall determine the date or dates of Substantial Completion in accordance with Section 9.8 and the date of final completion in accordance with Section 9.10.

§ 7.8 Owner's Right to Stop Work

If the Design-Builder fails to correct Work which is not in accordance with the requirements of the Design-Build Documents as required by Section 11.2 or persistently fails to carry out Work in accordance with the Design-Build Documents, the Owner may issue a written order to the Design-Builder 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 Design-Builder or any other person or entity, except to the extent required by Section 5.13.1.3.

§ 7.9 Owner's Right to Carry Out the Work

If the Design-Builder defaults or neglects to carry out the Work in accordance with the Design-Build Documents and fails within a ten-day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such deficiencies. In such case, an appropriate Change Order shall be issued deducting from payments then or thereafter due the Design-Builder the reasonable cost of correcting such deficiencies. If payments then or thereafter due the Design-Builder are not sufficient to cover such amounts, the Design-Builder shall pay the difference to the Owner.

ARTICLE 8 TIME

§ 8.1 Progress and Completion

§ 8.1.1 Time limits stated in the Design-Build Documents are of the essence of the Contract. By executing the Design-Build Amendment the Design-Builder confirms that the Contract Time is a reasonable period for performing the Work.

§ 8.1.2 The Design-Builder shall not, except by agreement of the Owner in writing, commence the Work prior to the effective date of insurance, other than property insurance, required by this Contract. The Contract Time shall not be adjusted as a result of the Design-Builder's failure to obtain insurance required under this Contract.

§ 8.1.3 The Design-Builder shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

§ 8.2 Delays and Extensions of Time

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

§ 8.2.2 Claims relating to time shall be made in accordance with applicable provisions of Article 14.

§ 8.2.3 This Section 8.2 does not preclude recovery of damages for delay by either party under other provisions of the Design-Build Documents.

ARTICLE 9 PAYMENT APPLICATIONS AND PROJECT COMPLETION

§ 9.1 Contract Sum

The Contract Sum is stated in the Design-Build Amendment.

§ 9.2 Schedule of Values

Where the Contract Sum is based on a stipulated sum or Guaranteed Maximum Price, the Design-Builder, prior to the first Application for Payment after execution of the Design-Build Amendment shall submit to the Owner a schedule of values allocating the entire Contract Sum to the various portions of the Work and prepared in such form and supported by such data to substantiate its accuracy as the Owner may require. This schedule, unless objected to by the Owner, shall be used as a basis for reviewing the Design-Builder's Applications for Payment.

§ 9.3 Applications for Payment

§ 9.3.1 At least ten days before the date established for each progress payment, the Design-Builder shall submit to the Owner an itemized Application for Payment for completed portions of the Work. The application shall be notarized, if required, and supported by data substantiating the Design-Builder's right to payment as the Owner may require, such as copies of requisitions from the Architect, Consultants, Contractors, and material suppliers, and shall reflect retainage if provided for in the Design-Build Documents.

§ 9.3.1.1 As provided in Section 6.3.9, Applications for Payment may include requests for payment on account of changes in the Work that have been properly authorized by Change Directives, or by interim determinations of the Owner, 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 Design-Builder does not intend to pay the Architect, Consultant, Contractor, material supplier, or other persons or entities providing services or work for the Design-Builder, unless such Work has been performed by others whom the Design-Builder intends to pay.

§ 9.3.2 Unless otherwise provided in the Design-Build Documents, payments shall be made for services provided as well as 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 Design-Builder 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 Design-Builder warrants that title to all Work, other than Instruments of Service, covered by an Application for Payment will pass to the Owner no later than the time of payment. The Design-Builder 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 Design-Builder's knowledge, information and belief, be free and clear of liens, claims, security interests or encumbrances in favor of the Design-Builder, Architect, Consultants, Contractors, material suppliers, or other persons or entities entitled to make a claim by reason of having provided labor, materials and equipment relating to the Work.

§ 9.4 Certificates for Payment

The Owner shall, within seven days after receipt of the Design-Builder's Application for Payment, issue to the Design-Builder a Certificate for Payment indicating the amount the Owner determines is properly due, and notify the Design-Builder in writing of the Owner's reasons for withholding certification in whole or in part as provided in Section 9.5.1.

§ 9.5 Decisions to Withhold Certification

§ 9.5.1 The Owner may withhold a Certificate for Payment in whole or in part to the extent reasonably necessary to protect the Owner due to the Owner's determination that the Work has not progressed to the point indicated in the Design-Builder's Application for Payment, or the quality of the Work is not in accordance with the Design-Build Documents. If the Owner is unable to certify payment in the amount of the Application, the Owner will notify the Design-Builder as provided in Section 9.4. If the Design-Builder and Owner cannot agree on a revised amount, the Owner will promptly issue a Certificate for Payment for the amount that the Owner deems to be due and owing. The Owner 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 to protect the Owner from loss for which the Design-Builder is responsible because of

- .1 defective Work, including design and construction, 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 Design-Builder;
- .3 failure of the Design-Builder to make payments properly to the Architect, Consultants, Contractors or others, for services, 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 Design-Build Documents.

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

§ 9.5.3 If the Owner withholds certification for payment under Section 9.5.1.3, the Owner may, at its sole option, issue joint checks to the Design-Builder and to the Architect or any Consultants, Contractor, material or equipment suppliers, or other persons or entities providing services or work for the Design-Builder to whom the Design-Builder failed to make payment for Work properly performed or material or equipment suitably delivered.

§ 9.6 Progress Payments

§ 9.6.1 After the Owner has issued a Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Design-Build Documents.

§ 9.6.2 The Design-Builder shall pay each Architect, Consultant, Contractor, and other person or entity providing services or work for the Design-Builder no later than the time period required by applicable law, but in no event more than seven days after receipt of payment from the Owner the amount to which the Architect, Consultant, Contractor, and other person or entity providing services or work for the Design-Builder is entitled, reflecting percentages actually retained from payments to the Design-Builder on account of the portion of the Work performed by the Architect, Consultant, Contractor, or other person or entity. The Design-Builder shall, by appropriate agreement with each Architect, Consultant, Contractor, and other person or entity providing services or work for the Design-Builder, require each Architect, Consultant, Contractor, and other person or entity providing services or work for the Design-Builder to make payments to subconsultants and subcontractors in a similar manner.

§ 9.6.3 The Owner will, on request and if practicable, furnish to the Architect, a Consultant, Contractor, or other person or entity providing services or work for the Design-Builder, information regarding percentages of completion or amounts applied for by the Design-Builder and action taken thereon by the Owner on account of portions of the Work done by such Architect, Consultant, Contractor or other person or entity providing services or work for the Design-Builder.

§ 9.6.4 The Owner has the right to request written evidence from the Design-Builder that the Design-Builder has properly paid the Architect, Consultants, Contractors, or other person or entity providing services or work for the Design-Builder, amounts paid by the Owner to the Design-Builder for the Work. If the Design-Builder fails to furnish such evidence within seven days, the Owner shall have the right to contact the Architect, Consultants, and Contractors to ascertain whether they have been properly paid. The Owner shall have no obligation to pay or to see to the payment of money to a Consultant or Contractor, except as may otherwise be required by law.

§ 9.6.5 Design-Builder payments to material and equipment suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.

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

§ 9.6.7 Unless the Design-Builder provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Design-Builder for Work properly performed by the Architect, Consultants, Contractors and other person or entity providing services or work for the Design-Builder, shall be held by the Design-Builder for the Architect and those Consultants, Contractors, or other person or entity providing services or work for the Design-Builder, 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 Design-Builder, shall create any fiduciary liability or tort liability on the part of the Design-Builder for breach of trust or shall entitle any person or entity to an award of punitive damages against the Design-Builder for breach of the requirements of this provision.

§ 9.7 Failure of Payment

If the Owner does not issue a Certificate for Payment, through no fault of the Design-Builder, within the time required by the Design-Build Documents, then the Design-Builder may, upon seven additional days' written notice to the Owner, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Design-Builder's reasonable costs of shut-down, delay and start-up, plus interest as provided for in the Design-Build 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 Design-Build Documents so that the Owner can occupy or utilize the Work for its intended use. The date of Substantial Completion is the date certified by the Owner in accordance with this Section 9.8.

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

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

§ 9.8.4 Prior to issuance of the Certificate of Substantial Completion under Section 9.8.5, the Owner and Design-Builder shall discuss and then determine the parties' obligations to obtain and maintain property insurance following issuance of the Certificate of Substantial Completion.

§ 9.8.5 When the Work or designated portion thereof is substantially complete, the Design-Builder will prepare for the Owner's signature a Certificate of Substantial Completion that shall, upon the Owner's signature, establish the date of Substantial Completion; establish responsibilities of the Owner and Design-Builder for security, maintenance, heat, utilities, damage to the Work and insurance; and fix the time within which the Design-Builder shall finish all items on the list accompanying the Certificate. Warranties required by the Design-Build 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.

§ 9.8.6 The Certificate of Substantial Completion shall be submitted by the Design-Builder to the Owner for written acceptance of responsibilities assigned to it in the Certificate. Upon the Owner's acceptance, and consent of surety, if any, the Owner shall make payment of retainage applying to the Work or designated portion thereof. Payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Design-Build 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 Design-Builder, provided such occupancy or use is consented to, by endorsement or otherwise, by the insurer providing property insurance 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 Design-Builder 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 Design-Build Documents. When the Design-Builder considers a portion substantially complete, the Design-Builder shall prepare and submit a list to the Owner as provided under Section 9.8.2. Consent of the Design-Builder 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 Design-Builder.

§ 9.9.2 Immediately prior to such partial occupancy or use, the Owner and Design-Builder 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 Design-Build Documents.

§ 9.10 Final Completion and Final Payment

§ 9.10.1 Upon receipt of the Design-Builder's written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Owner will promptly make such inspection. When the Owner

finds the Work acceptable under the Design-Build Documents and the Contract fully performed, the Owner will, subject to Section 9.10.2, promptly issue a final Certificate for Payment.

§ 9.10.2 Neither final payment nor any remaining retained percentage shall become due until the Design-Builder submits to the Owner (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work, for which the Owner or the Owner's property might be responsible or encumbered, (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Design-Build Documents to remain in force after final payment is currently in effect, (3) a written statement that the Design-Builder knows of no substantial reason that the insurance will not be renewable to cover the period required by the Design-Build Documents, (4) consent of surety, if any, to final payment, (5) as-constructed record copy of the Construction Documents marked to indicate field changes and selections made during construction, (6) manufacturer's warranties, product data, and maintenance and operations manuals, and (7) if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts, or 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 an Architect, a Consultant, or a Contractor, or other person or entity providing services or work for the Design-Builder, refuses to furnish a release or waiver required by the Owner, the Design-Builder may furnish a bond satisfactory to the Owner to indemnify the Owner against such liens, claims, security interests, or encumbrances. If such liens, claims, security interests, or encumbrances remains unsatisfied after payments are made, the Design-Builder shall refund to the Owner all money that the Owner may be compelled to pay in discharging such liens, claims, security interests, or encumbrances, 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 Design-Builder or by issuance of Change Orders affecting final completion, the Owner shall, upon application by the Design-Builder, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Design-Build Documents, and if bonds have been furnished, the written consent of surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Design-Builder to the Owner prior to issuance of 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 Design-Build Documents; or
- .3 terms of special warranties required by the Design-Build Documents.

§ 9.10.5 Acceptance of final payment by the Design-Builder shall constitute a waiver of claims by the Design-Builder except those previously made in writing and identified by the Design-Builder as unsettled at the time of final Application for Payment.

ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

§ 10.1 Safety Precautions and Programs

The Design-Builder 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 Design-Builder shall be responsible for precautions for the safety of, and 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 Design-Builder or the Architect, Consultants, or Contractors, or other person or entity providing services or work for the Design-Builder; and
- .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, or structures and utilities not designated for removal, relocation or replacement in the course of construction.

§ 10.2.2 The Design-Builder 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 Design-Builder 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 notify owners and users of adjacent sites and utilities of the safeguards and protections.

§ 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 Design-Builder shall exercise utmost care, and carry on such activities under supervision of properly qualified personnel.

§ 10.2.5 The Design-Builder shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Design-Build Documents) to property referred to in Sections 10.2.1.2 and 10.2.1.3, caused in whole or in part by the Design-Builder, the Architect, a Consultant, a Contractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Design-Builder is responsible under Sections 10.2.1.2 and 10.2.1.3; except damage or loss attributable to acts or omissions of the Owner, or anyone directly or indirectly employed by the Owner, or by anyone for whose acts the Owner may be liable, and not attributable to the fault or negligence of the Design-Builder. The foregoing obligations of the Design-Builder are in addition to the Design-Builder's obligations under Section 3.1.14.

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

§ 10.2.7 The Design-Builder 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 the Owner or Design-Builder suffers injury or damage to person or property because of an act or omission of the other, or of others for whose acts such party is legally responsible, written 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

§ 10.3.1 The Design-Builder is responsible for compliance with any requirements included in the Design-Build Documents regarding hazardous materials. If the Design-Builder encounters a hazardous material or substance not addressed in the Design-Build 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 Design-Builder, the Design-Builder shall, upon recognizing the condition, immediately stop Work in the affected area and report the condition to the Owner in writing.

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

§ 10.3.3 To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Design-Builder, the Architect, Consultants, and Contractors, and employees of any of them, from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area, if in fact the material or substance presents the risk of bodily injury or death as described in Section

10.3.1 and has not been rendered harmless, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to, or destruction of, tangible property (other than the Work itself), except to the extent that such damage, loss or expense is due to the fault or negligence of the party seeking indemnity.

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

§ 10.3.5 The Design-Builder shall indemnify the Owner for the cost and expense the Owner incurs (1) for remediation of a material or substance the Design-Builder brings to the site and negligently handles, or (2) where the Design-Builder 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 Design-Builder, the Design-Builder 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 Design-Build Documents, the Owner shall indemnify the Design-Builder for all cost and expense thereby incurred.

§ 10.4 Emergencies

In an emergency affecting safety of persons or property, the Design-Builder shall act, at the Design-Builder's discretion, to prevent threatened damage, injury or loss.

ARTICLE 11 UNCOVERING AND CORRECTION OF WORK

§ 11.1 Uncovering of Work

The Owner may request to examine a portion of the Work that the Design-Builder has covered to determine if the Work has been performed in accordance with the Design-Build Documents. If such Work is in accordance with the Design-Build Documents, the Owner and Design-Builder shall execute a Change Order to adjust the Contract Time and Contract Sum, as appropriate. If such Work is not in accordance with the Design-Build Documents, the costs of uncovering and correcting the Work shall be at the Design-Builder's expense and the Design-Builder shall not be entitled to a change in the Contract Time unless the condition was caused by the Owner or a separate contractor in which event the Owner shall be responsible for payment of such costs and the Contract Time will be adjusted as appropriate.

§ 11.2 Correction of Work

§ 11.2.1 Before or After Substantial Completion. The Design-Builder shall promptly correct Work rejected by the Owner or failing to conform to the requirements of the Design-Build Documents, whether discovered before or after Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for any design consultant employed by the Owner whose expenses and compensation were made necessary thereby, shall be at the Design-Builder's expense.

§ 11.2.2 After Substantial Completion

§ 11.2.2.1 In addition to the Design-Builder's obligations under Section 3.1.12, if, within one year after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Section 9.9.1, or by terms of an applicable special warranty required by the Design-Build Documents, any of the Work is found not to be in accordance with the requirements of the Design-Build Documents, the Design-Builder shall correct it promptly after receipt of written notice from the Owner to do so unless the Owner has previously given the Design-Builder 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 the Work, if the Owner fails to notify the Design-Builder and give the Design-Builder an opportunity to make the correction, the Owner waives the rights to require correction by the Design-Builder and to make a claim for breach of warranty. If the Design-Builder fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner, the Owner may correct it in accordance with Section 7.9.

§ 11.2.2.2 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.

§ 11.2.2.3 The one-year period for correction of Work shall not be extended by corrective Work performed by the Design-Builder pursuant to this Section 11.2.

§ 11.2.3 The Design-Builder shall remove from the site portions of the Work that are not in accordance with the requirements of the Design-Build Documents and are neither corrected by the Design-Builder nor accepted by the Owner.

§ 11.2.4 The Design-Builder shall bear the cost of correcting destroyed or damaged construction of the Owner or separate contractors, whether completed or partially completed, caused by the Design-Builder's correction or removal of Work that is not in accordance with the requirements of the Design-Build Documents.

§ 11.2.5 Nothing contained in this Section 11.2 shall be construed to establish a period of limitation with respect to other obligations the Design-Builder has under the Design-Build Documents. Establishment of the one-year period for correction of Work as described in Section 11.2.2 relates only to the specific obligation of the Design-Builder to correct the Work, and has no relationship to the time within which the obligation to comply with the Design-Build Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Design-Builder's liability with respect to the Design-Builder's obligations other than specifically to correct the Work.

§ 11.3 Acceptance of Nonconforming Work

If the Owner prefers to accept Work that is not in accordance with the requirements of the Design-Build 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 12 COPYRIGHTS AND LICENSES

§ 12.1 Drawings, specifications, and other documents furnished by the Design-Builder, including those in electronic form, are Instruments of Service. The Design-Builder, and the Architect, Consultants, Contractors, and any other person or entity providing services or work for any of them, shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and shall retain all common law, statutory and other reserved rights, including copyrights. Submission or distribution of Instruments of Service to meet official regulatory requirements, or for similar purposes in connection with the Project, is not to be construed as publication in derogation of the reserved rights of the Design-Builder and the Architect, Consultants, and Contractors, and any other person or entity providing services or work for any of them.

§ 12.2 The Design-Builder and the Owner warrant that in transmitting Instruments of Service, or any other information, the transmitting party is the copyright owner of such information or has permission from the copyright owner to transmit such information for its use on the Project.

§ 12.3 Upon execution of the Agreement, the Design-Builder grants to the Owner a limited, irrevocable and non-exclusive license to use the Instruments of Service solely and exclusively for purposes of constructing, using, maintaining, altering and adding to the Project, provided that the Owner substantially performs its obligations, including prompt payment of all sums when due, under the Design-Build Documents. The license granted under this section permits the Owner to authorize its consultants and separate contractors to reproduce applicable portions of the Instruments of Service solely and exclusively for use in performing services or construction for the Project. If the Design-Builder rightfully terminates this Agreement for cause as provided in Section 13.1.4 or 13.2.1 the license granted in this Section 12.3 shall terminate.

§ 12.3.1 The Design-Builder shall obtain non-exclusive licenses from the Architect, Consultants, and Contractors, that will allow the Design-Builder to satisfy its obligations to the Owner under this Article 12. The Design-Builder's licenses from the Architect and its Consultants and Contractors shall also allow the Owner, in the event this Agreement is terminated for any reason other than the default of the Owner or in the event the Design-Builder's Architect, Consultants, or Contractors terminate their agreements with the Design-Builder for cause, to obtain a limited, irrevocable and non-exclusive license solely and exclusively for purposes of constructing, using, maintaining, altering and adding to the Project, provided that the Owner (1) agrees to pay to the Architect, Consultant or Contractor all amounts due, and (2) provide the Architect, Consultant or Contractor with the Owner's written agreement to indemnify and hold harmless the Architect, Consultant or Contractor from all costs and expenses, including the cost of

defense, related to claims and causes of action asserted by any third person or entity to the extent such costs and expenses arise from the Owner's alteration or use of the Instruments of Service.

§ 12.3.2 In the event the Owner alters the Instruments of Service without the author's written authorization or uses the Instruments of Service without retaining the authors of the Instruments of Service, the Owner releases the Design-Builder, Architect, Consultants, Contractors and any other person or entity providing services or work for any of them, from all claims and causes of action arising from or related to such uses. The Owner, to the extent permitted by law, further agrees to indemnify and hold harmless the Design-Builder, Architect, Consultants, Contractors and any other person or entity providing services or work for any of them, from all costs and expenses, including the cost of defense, related to claims and causes of action asserted by any third person or entity to the extent such costs and expenses arise from the Owner's alteration or use of the Instruments of Service under this Section 12.3.2. The terms of this Section 12.3.2 shall not apply if the Owner rightfully terminates this Agreement for cause under Sections 13.1.4 or 13.2.2.

ARTICLE 13 TERMINATION OR SUSPENSION

§ 13.1 Termination or Suspension Prior to Execution of the Design-Build Amendment

§ 13.1.1 If the Owner fails to make payments to the Design-Builder for Work prior to execution of the Design-Build Amendment in accordance with this Agreement, such failure shall be considered substantial nonperformance and cause for termination or, at the Design-Builder's option, cause for suspension of performance of services under this Agreement. If the Design-Builder elects to suspend the Work, the Design-Builder shall give seven days' written notice to the Owner before suspending the Work. In the event of a suspension of the Work, the Design-Builder shall have no liability to the Owner for delay or damage caused by the suspension of the Work. Before resuming the Work, the Design-Builder shall be paid all sums due prior to suspension and any expenses incurred in the interruption and resumption of the Design-Builder's Work. The Design-Builder's compensation for, and time to complete, the remaining Work shall be equitably adjusted.

§ 13.1.2 If the Owner suspends the Project, the Design-Builder shall be compensated for the Work performed prior to notice of such suspension. When the Project is resumed, the Design-Builder shall be compensated for expenses incurred in the interruption and resumption of the Design-Builder's Work. The Design-Builder's compensation for, and time to complete, the remaining Work shall be equitably adjusted.

§ 13.1.3 If the Owner suspends the Project for more than 90 cumulative days for reasons other than the fault of the Design-Builder, the Design-Builder may terminate this Agreement by giving not less than seven days' written notice.

§ 13.1.4 Either party may terminate this Agreement upon not less than seven days' written notice should the other party fail substantially to perform in accordance with the terms of this Agreement through no fault of the party initiating the termination.

§ 13.1.5 The Owner may terminate this Agreement upon not less than seven days' written notice to the Design-Builder for the Owner's convenience and without cause.

§ 13.1.6 In the event of termination not the fault of the Design-Builder, the Design-Builder shall be compensated for Work performed prior to termination, together with Reimbursable Expenses then due and any other expenses directly attributable to termination for which the Design-Builder is not otherwise compensated. In no event shall the Design-Builder's compensation under this Section 13.1.6 be greater than the compensation set forth in Section 2.1.

§ 13.2 Termination or Suspension Following Execution of the Design-Build Amendment

§ 13.2.1 Termination by the Design-Builder

§ 13.2.1.1 The Design-Builder may terminate the Contract if the Work is stopped for a period of 30 consecutive days through no act or fault of the Design-Builder, the Architect, a Consultant, or a Contractor, or their agents or employees, or any other persons or entities performing portions of the Work under direct or indirect contract with the Design-Builder, for any of the following reasons:

- .1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped;
- .2 An act of government, such as a declaration of national emergency that requires all Work to be stopped;
- .3 Because the Owner has not issued a Certificate for Payment and has not notified the Design-Builder of the reason for withholding certification as provided in Section 9.5.1, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Design-Build Documents; or

- 4 The Owner has failed to furnish to the Design-Builder promptly, upon the Design-Builder's request, reasonable evidence as required by Section 7.2.7.

§ 13.2.1.2 The Design-Builder may terminate the Contract if, through no act or fault of the Design-Builder, the Architect, a Consultant, a Contractor, or their agents or employees or any other persons or entities performing portions of the Work under direct or indirect contract with the Design-Builder, repeated suspensions, delays or interruptions of the entire Work by the Owner as described in Section 13.2.3 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.

§ 13.2.1.3 If one of the reasons described in Section 13.2.1.1 or 13.2.1.2 exists, the Design-Builder may, upon seven days' written notice to the Owner, terminate the Contract and recover from the Owner payment for Work executed, including reasonable overhead and profit, costs incurred by reason of such termination, and damages.

§ 13.2.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Design-Builder or any other persons or entities performing portions of the Work under contract with the Design-Builder because the Owner has repeatedly failed to fulfill the Owner's obligations under the Design-Build Documents with respect to matters important to the progress of the Work, the Design-Builder may, upon seven additional days' written notice to the Owner, terminate the Contract and recover from the Owner as provided in Section 13.2.1.3.

§ 13.2.2 Termination by the Owner For Cause

§ 13.2.2.1 The Owner may terminate the Contract if the Design-Builder

- 1 fails to submit the Proposal by the date required by this Agreement, or if no date is indicated, within a reasonable time consistent with the date of Substantial Completion;
- 2 repeatedly refuses or fails to supply an Architect, or enough properly skilled Consultants, Contractors, or workers or proper materials;
- 3 fails to make payment to the Architect, Consultants, or Contractors for services, materials or labor in accordance with their respective agreements with the Design-Builder;
- 4 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- 5 is otherwise guilty of substantial breach of a provision of the Design-Build Documents.

§ 13.2.2.2 When any of the above reasons exist, the Owner may without prejudice to any other rights or remedies of the Owner and after giving the Design-Builder and the Design-Builder's surety, if any, seven days' written notice, terminate employment of the Design-Builder and may, subject to any prior rights of the surety:

- 1 Exclude the Design-Builder from the site and take possession of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Design-Builder;
- 2 Accept assignment of the Architect, Consultant and Contractor agreements pursuant to Section 3.1.15; and
- 3 Finish the Work by whatever reasonable method the Owner may deem expedient. Upon written request of the Design-Builder, the Owner shall furnish to the Design-Builder a detailed accounting of the costs incurred by the Owner in finishing the Work.

§ 13.2.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 13.2.2.1, the Design-Builder shall not be entitled to receive further payment until the Work is finished.

§ 13.2.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work and other damages incurred by the Owner and not expressly waived, such excess shall be paid to the Design-Builder. If such costs and damages exceed the unpaid balance, the Design-Builder shall pay the difference to the Owner. The obligation for such payments shall survive termination of the Contract.

§ 13.2.3 Suspension by the Owner for Convenience

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

§ 13.2.3.2 The Contract Sum and Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay or interruption as described in Section 13.2.3.1. 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 Design-Builder is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of the Contract.

§ 13.2.4 Termination by the Owner for Convenience

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

§ 13.2.4.2 Upon receipt of written notice from the Owner of such termination for the Owner's convenience, the Design-Builder 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 Project agreements, including agreements with the Architect, Consultants, Contractors, and purchase orders, and enter into no further Project agreements and purchase orders.

§ 13.2.4.3 In case of such termination for the Owner's convenience, the Design-Builder shall be entitled to receive payment for Work executed, and costs incurred by reason of such termination, along with reasonable overhead and profit on the Work not executed.

ARTICLE 14 CLAIMS AND DISPUTE RESOLUTION

§ 14.1 Claims

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

§ 14.1.2 **Time Limits on Claims.** The Owner and Design-Builder shall commence all claims and causes of action, whether in contract, tort, breach of warranty or otherwise, against the other, arising out of or related to the Contract in accordance with the requirements of the binding dispute resolution method selected in Section 1.3, within the time period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and Design-Builder waive all claims and causes of action not commenced in accordance with this Section 14.1.2.

§ 14.1.3 Notice of Claims

§ 14.1.3.1 **Prior To Final Payment.** Prior to Final Payment, Claims by either the Owner or Design-Builder must be initiated by written notice to the other party 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.

§ 14.1.3.2 **Claims Arising After Final Payment.** After Final Payment, Claims by either the Owner or Design-Builder that have not otherwise been waived pursuant to Sections 9.10.4 or 9.10.5, must be initiated by prompt written notice to the other party. The notice requirement in Section 14.1.3.1 and the Initial Decision requirement as a condition precedent to mediation in Section 14.2.1 shall not apply.

§ 14.1.4 **Continuing Contract Performance.** Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 13, the Design-Builder shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Design-Build Documents.

§ 14.1.5 **Claims for Additional Cost.** If the Design-Builder intends to make a Claim for an increase in the Contract Sum, written notice as provided herein shall be given before proceeding to execute the portion of the Work that relates to the Claim. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4.

§ 14.1.6 Claims for Additional Time

§ 14.1.6.1 If the Design-Builder intends to make a Claim for an increase in the Contract Time, written notice as provided herein shall be given. The Design-Builder'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.

§ 14.1.6.2 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.

§ 14.1.7 Claims for Consequential Damages

The Design-Builder 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 Design-Builder 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 13. Nothing contained in this Section 14.1.7 shall be deemed to preclude an award of liquidated damages, when applicable, in accordance with the requirements of the Design-Build Documents.

§ 14.2 Initial Decision

§ 14.2.1 An initial decision shall be required as a condition precedent to mediation of all Claims between the Owner and Design-Builder initiated prior to the date final payment is due, excluding those arising under Sections 10.3 and 10.4 of the Agreement and Sections B.3.2.9 and B.3.2.10 of Exhibit B to this Agreement, unless 30 days have passed after the Claim has been initiated with no decision having been rendered. Unless otherwise mutually agreed in writing, the Owner shall render the initial decision on Claims.

§ 14.2.2 Procedure

§ 14.2.2.1 Claims Initiated by the Owner. If the Owner initiates a Claim, the Design-Builder shall provide a written response to Owner within ten days after receipt of the notice required under Section 14.1.3.1. Thereafter, the Owner shall render an initial decision within ten days of receiving the Design-Builder's response: (1) withdrawing the Claim in whole or in part, (2) approving the Claim in whole or in part, or (3) suggesting a compromise.

§ 14.2.2.2 Claims Initiated by the Design-Builder. If the Design-Builder initiates a Claim, the Owner will take one or more of the following actions within ten days after receipt of the notice required under Section 14.1.3.1: (1) request additional supporting data, (2) render an initial decision rejecting the Claim in whole or in part, (3) render an initial decision approving the Claim, (4) suggest a compromise or (5) indicate that it is unable to render an initial decision because the Owner lacks sufficient information to evaluate the merits of the Claim.

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

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

§ 14.2.5 The Owner's initial decision shall (1) be in writing; (2) state the reasons therefor; and (3) identify 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.

§ 14.2.6 Either party may file for mediation of an initial decision at any time, subject to the terms of Section 14.2.6.1.

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

§ 14.2.7 In the event of a Claim against the Design-Builder, 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 Design-Builder's default, the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

§ 14.2.8 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.

§ 14.3 Mediation

§ 14.3.1 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 14.1.7, shall be subject to mediation as a condition precedent to binding dispute resolution.

§ 14.3.2 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 proceeding is stayed pursuant to this Section 14.3.2, the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.

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

§ 14.4 Arbitration

§ 14.4.1 If the parties have selected arbitration as the method for binding dispute resolution in Section 1.3, any Claim subject to, but not resolved by, mediation shall be subject to arbitration which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules in effect on the date of the Agreement. A demand for arbitration shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the arbitration. The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded.

§ 14.4.1.1 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 or statute of repose. For statute of limitations or statute of repose 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.

§ 14.4.2 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.

§ 14.4.3 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.

§ 14.4.4 Consolidation or Joinder

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

§ 14.4.4.2 Either party, at its sole discretion, may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration, provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional

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

§ 14.4.4.3 The Owner and Design-Builder grant to any person or entity made a party to an arbitration conducted under this Section 14.4, whether by joinder or consolidation, the same rights of joinder and consolidation as the Owner and Design-Builder under this Agreement.

ARTICLE 15 MISCELLANEOUS PROVISIONS

§ 15.1 Governing Law

The Contract shall be governed by the law of the place where the Project is located except that, if the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern Section 14.4.

§ 15.2 Successors and Assigns

§ 15.2.1 The Owner and Design-Builder, respectively, bind themselves, their partners, successors, assigns and legal representatives to the covenants, agreements and obligations contained in the Design-Build Documents. Except as provided in Section 15.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

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

§ 15.2.3 If the Owner requests the Design-Builder, Architect, Consultants, or Contractors to execute certificates, other than those required by Section 3.1.10, the Owner shall submit the proposed language of such certificates for review at least 14 days prior to the requested dates of execution. If the Owner requests the Design-Builder, Architect, Consultants, or Contractors to execute consents reasonably required to facilitate assignment to a lender, the Design-Builder, Architect, Consultants, or Contractors shall execute all such consents that are consistent with this Agreement, provided the proposed consent is submitted to them for review at least 14 days prior to execution. The Design-Builder, Architect, Consultants, and Contractors shall not be required to execute certificates or consents that would require knowledge, services or responsibilities beyond the scope of their services.

§ 15.3 Written Notice

Written notice shall be deemed to have been duly served if delivered in person to the individual, to a member of the firm or entity, or to an officer of the corporation for which it was intended; or if delivered at, or sent by registered or certified mail or by courier service providing proof of delivery to, the last business address known to the party giving notice.

§ 15.4 Rights and Remedies

§ 15.4.1 Duties and obligations imposed by the Design-Build 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.

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

§ 15.5 Tests and Inspections

§ 15.5.1 Tests, inspections and approvals of portions of the Work shall be made as required by the Design-Build Documents and by applicable laws, statutes, ordinances, codes, rules and regulations or lawful orders of public authorities. Unless otherwise provided, the Design-Builder 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 Design-Builder shall give the Owner timely notice of when and where tests and inspections are to be made so that the Owner may be present for such procedures. The Owner shall bear costs of (1) tests, inspections or approvals that do not become requirements until after bids are received or negotiations concluded, and (2) tests, inspections or approvals where building codes or applicable laws or regulations prohibit the Owner from delegating their cost to the Design-Builder.

§ 15.5.2 If the Owner determines that portions of the Work require additional testing, inspection or approval not included under Section 15.5.1, the Owner will instruct the Design-Builder to make arrangements for such additional testing, inspection or approval by an entity acceptable to the Owner, and the Design-Builder shall give timely notice to the Owner of when and where tests and inspections are to be made so that the Owner may be present for such procedures. Such costs, except as provided in Section 15.5.3, shall be at the Owner's expense.

§ 15.5.3 If such procedures for testing, inspection or approval under Sections 15.5.1 and 15.5.2 reveal failure of the portions of the Work to comply with requirements established by the Design-Build Documents, all costs made necessary by such failure shall be at the Design-Builder's expense.

§ 15.5.4 Required certificates of testing, inspection or approval shall, unless otherwise required by the Design-Build Documents, be secured by the Design-Builder and promptly delivered to the Owner.

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

§ 15.5.6 Tests or inspections conducted pursuant to the Design-Build Documents shall be made promptly to avoid unreasonable delay in the Work.

§ 15.6 Confidential Information

If the Owner or Design-Builder transmits Confidential Information, the transmission of such Confidential Information constitutes a warranty to the party receiving such Confidential Information that the transmitting party is authorized to transmit the Confidential Information. If a party receives Confidential Information, the receiving party shall keep the Confidential Information strictly confidential and shall not disclose it to any other person or entity except as set forth in Section 15.6.1.

§ 15.6.1 A party receiving Confidential Information may disclose the Confidential Information as required by law or court order, including a subpoena or other form of compulsory legal process issued by a court or governmental entity. A party receiving Confidential Information may also disclose the Confidential Information to its employees, consultants or contractors in order to perform services or work solely and exclusively for the Project, provided those employees, consultants and contractors are subject to the restrictions on the disclosure and use of Confidential Information as set forth in this Contract.

§ 15.7 Capitalization

Terms capitalized in the Contract 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.

§ 15.8 Interpretation

§ 15.8.1 In the interest of brevity the Design-Build 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.

§ 15.8.2 Unless otherwise stated in the Design-Build Documents, words which have well-known technical or construction industry meanings are used in the Design-Build Documents in accordance with such recognized meanings.

ARTICLE 16 SCOPE OF THE AGREEMENT

§ 16.1 This Agreement is comprised of the following documents listed below:

- .1 AIA Document A141™-2014, Standard Form of Agreement Between Owner and Design-Builder
- .2 AIA Document A141™-2014, Exhibit A, Design-Build Amendment, if executed
- .3 AIA Document A141™-2014, Exhibit B, Insurance and Bonds
- .4 AIA Document A141™-2014, Exhibit C, Sustainable Projects, if completed
- .5 AIA Document E203™-2013, Building Information Modeling and Digital Data Exhibit, if completed, or the following:



- .6 Other:



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

« »

OWNER *(Signature)*
« »

(Printed name and title)

« »

DESIGN-BUILDER *(Signature)*
« »

(Printed name and title)



DRAFT AIA® Document A141™ – 2014

Exhibit A

Design-Build Amendment

This Amendment is incorporated into the accompanying AIA Document A141™–2014, Standard Form of Agreement Between Owner and Design-Builder dated the «» day of «» in the year «» (the “Agreement”)
(In words, indicate day, month and year.)

for the following PROJECT:
(Name and location or address)

«»
«»

THE OWNER:
(Name, legal status and address)

«»
«»

THE DESIGN-BUILDER:
(Name, legal status and address)

«»
«»

The Owner and Design-Builder hereby amend the Agreement as follows.

TABLE OF ARTICLES

A.1 CONTRACT SUM

A.2 CONTRACT TIME

A.3 INFORMATION UPON WHICH AMENDMENT IS BASED

A.4 DESIGN-BUILDER’S PERSONNEL, CONTRACTORS AND SUPPLIERS

A.5 COST OF THE WORK

ARTICLE A.1 CONTRACT SUM

§ A.1.1 The Owner shall pay the Design-Builder the Contract Sum in current funds for the Design-Builder’s performance of the Contract after the execution of this Amendment. The Contract Sum shall be one of the following and shall not include compensation the Owner paid the Design-Builder for Work performed prior to execution of this Amendment:
(Check the appropriate box.)

[] Stipulated Sum, in accordance with Section A.1.2 below

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

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

Consultation with an attorney is also encouraged with respect to professional licensing requirements in the jurisdiction where the Project is located.

[<>] Cost of the Work plus the Design-Builder's Fee, in accordance with Section A.1.3 below

[<>] Cost of the Work plus the Design-Builder's Fee with a Guaranteed Maximum Price, in accordance with Section A.1.4 below

(Based on the selection above, complete Section A.1.2, A.1.3 or A.1.4 below.)

§ A.1.2 Stipulated Sum

§ A.1.2.1 The Stipulated Sum shall be <> (\$ <>), subject to authorized adjustments as provided in the Design-Build Documents.

§ A.1.2.2 The Stipulated Sum is based upon the following alternates, if any, which are described in the Design-Build Documents and are hereby accepted by the Owner:

(State the numbers or other identification of accepted alternates. If the Owner is permitted to accept other alternates subsequent to the execution of this Amendment, attach a schedule of such other alternates showing the change in Stipulated Sum for each and the deadline by which the alternate must be accepted.)

<>

§ A.1.2.3 Unit prices, if any:

(Identify item, state the unit price, and state any applicable quantity limitations.)

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

§ A.1.3 Cost of the Work Plus Design-Builder's Fee

§ A.1.3.1 The Cost of the Work is as defined in Article A.5, Cost of the Work.

§ A.1.3.2 The Design-Builder's Fee:

(State a lump sum, percentage of Cost of the Work or other provision for determining the Design-Builder's Fee, and the method for adjustment to the Fee for changes in the Work.)

<>

§ A.1.4 Cost of the Work Plus Design-Builder's Fee With a Guaranteed Maximum Price

§ A.1.4.1 The Cost of the Work is as defined in Article A.5, Cost of the Work.

§ A.1.4.2 The Design-Builder's Fee:

(State a lump sum, percentage of Cost of the Work or other provision for determining the Design-Builder's Fee and the method for adjustment to the Fee for changes in the Work.)

<>

§ A.1.4.3 Guaranteed Maximum Price

§ A.1.4.3.1 The sum of the Cost of the Work and the Design-Builder's Fee is guaranteed by the Design-Builder not to exceed <> (\$ <>), subject to additions and deductions for changes in the Work as provided in the Design-Build Documents. Costs that would cause the Guaranteed Maximum Price to be exceeded shall be paid by the Design-Builder without reimbursement by the Owner.

(Insert specific provisions if the Design-Builder is to participate in any savings.)

<>

§ A.1.4.3.2 Itemized Statement of the Guaranteed Maximum Price

Provided below is an itemized statement of the Guaranteed Maximum Price organized by trade categories, allowances, contingencies, alternates, the Design-Builder's Fee, and other items that comprise the Guaranteed Maximum Price.

(Provide information below or reference an attachment.)

<>

§ A.1.4.3.3 The Guaranteed Maximum Price is based on the following alternates, if any, which are described in the Design-Build Documents and are hereby accepted by the Owner:
(State the numbers or other identification of accepted alternates. If the Owner is permitted to accept other alternates subsequent to the execution of this Amendment, attach a schedule of such other alternates showing the change in the Cost of the Work and Guaranteed Maximum Price for each and the deadline by which the alternate must be accepted.)

« »

§ A.1.4.3.4 Unit Prices, if any:
(Identify item, state the unit price, and state any applicable quantity limitations.)

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

§ A.1.4.3.5 Assumptions, if any, on which the Guaranteed Maximum Price is based:

« »

§ A.1.5 Payments

§ A.1.5.1 Progress Payments

§ A.1.5.1.1 Based upon Applications for Payment submitted to the Owner by the Design-Builder, the Owner shall make progress payments on account of the Contract Sum to the Design-Builder as provided below and elsewhere in the Design-Build Documents.

§ A.1.5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

« »

§ A.1.5.1.3 Provided that an Application for Payment is received not later than the « » day of the month, the Owner shall make payment of the certified amount to the Design-Builder not later than the « » day of the « » month. If an Application for Payment is received by the Owner after the application date fixed above, payment shall be made by the Owner not later than « » (« ») days after the Owner receives the Application for Payment.
(Federal, state or local laws may require payment within a certain period of time.)

§ A.1.5.1.4 With each Application for Payment where the Contract Sum is based upon the Cost of the Work, or the Cost of the Work with a Guaranteed Maximum Price, the Design-Builder shall submit payrolls, petty cash accounts, receipted invoices or invoices with check vouchers attached, and any other evidence required by the Owner to demonstrate that cash disbursements already made by the Design-Builder on account of the Cost of the Work equal or exceed (1) progress payments already received by the Design-Builder, less (2) that portion of those payments attributable to the Design-Builder's Fee; plus (3) payrolls for the period covered by the present Application for Payment.

§ A.1.5.1.5 With each Application for Payment where the Contract Sum is based upon a Stipulated Sum or Cost of the Work with a Guaranteed Maximum Price, the Design-Builder shall submit the most recent schedule of values in accordance with the Design-Build Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. Compensation for design services, if any, shall be shown separately. Where the Contract Sum is based on the Cost of the Work with a Guaranteed Maximum Price, the Design-Builder's Fee shall be shown separately. The schedule of values shall be prepared in such form and supported by such data to substantiate its accuracy as the Owner may require. This schedule of values, unless objected to by the Owner, shall be used as a basis for reviewing the Design-Builder's Applications for Payment.

§ A.1.5.1.6 In taking action on the Design-Builder's Applications for Payment, the Owner shall be entitled to rely on the accuracy and completeness of the information furnished by the Design-Builder and shall not be deemed to have made a detailed examination, audit or arithmetic verification of the documentation submitted in accordance with Sections A.1.5.1.4 or A.1.5.1.5, or other supporting data; to have made exhaustive or continuous on-site inspections; or to have made examinations to ascertain how or for what purposes the Design-Builder has used amounts previously

paid. Such examinations, audits and verifications, if required by the Owner, will be performed by the Owner's auditors acting in the sole interest of the Owner.

§ A.1.5.1.7 Except with the Owner's prior approval, the Design-Builder shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

§ A.1.5.2 Progress Payments—Stipulated Sum

§ A.1.5.2.1 Applications for Payment where the Contract Sum is based upon a Stipulated Sum shall indicate the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

§ A.1.5.2.2 Subject to other provisions of the Design-Build Documents, the amount of each progress payment shall be computed as follows:

- .1 Take that portion of the Contract Sum properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the Contract Sum allocated to that portion of the Work in the schedule of values, less retainage of « » percent (« » %) on the Work. Pending final determination of cost to the Owner of Changes in the Work, amounts not in dispute shall be included as provided in Section 6.3.9 of the Agreement;
- .2 Add that portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing), less retainage of « » percent (« » %);
- .3 Subtract the aggregate of previous payments made by the Owner; and
- .4 Subtract amounts, if any, the Owner has withheld or nullified, as provided in Section 9.5 of the Agreement.

§ A.1.5.2.3 The progress payment amount determined in accordance with Section A.1.5.2.2 shall be further modified under the following circumstances:

- .1 Add, upon Substantial Completion of the Work, a sum sufficient to increase the total payments to the full amount of the Contract Sum, less such amounts as the Owner shall determine for incomplete Work, retainage applicable to such work and unsettled claims; and
(Section 9.8.6 of the Agreement discusses release of applicable retainage upon Substantial Completion of Work.)
- .2 Add, if final completion of the Work is thereafter materially delayed through no fault of the Design-Builder, any additional amounts payable in accordance with Section 9.10.3 of the Agreement.

§ A.1.5.2.4 Reduction or limitation of retainage, if any, shall be as follows:

(If it is intended, prior to Substantial Completion of the entire Work, to reduce or limit the retainage resulting from the percentages inserted in Sections A.1.5.2.2.1 and A.1.5.2.2.2 above, and this is not explained elsewhere in the Design-Build Documents, insert provisions here for such reduction or limitation.)

« »

§ A.1.5.3 Progress Payments—Cost of the Work Plus a Fee

§ A.1.5.3.1 Where the Contract Sum is based upon the Cost of the Work plus a fee without a Guaranteed Maximum Price, Applications for Payment shall show the Cost of the Work actually incurred by the Design-Builder through the end of the period covered by the Application for Payment and for which Design-Builder has made or intends to make actual payment prior to the next Application for Payment.

§ A.1.5.3.2 Subject to other provisions of the Design-Build Documents, the amount of each progress payment shall be computed as follows:

- .1 Take the Cost of the Work as described in Article A.5 of this Amendment;
- .2 Add the Design-Builder's Fee, less retainage of « » percent (« » %). The Design-Builder's Fee shall be computed upon the Cost of the Work described in the preceding Section A.1.5.3.2.1 at the rate stated in Section A.1.3.2; or if the Design-Builder's Fee is stated as a fixed sum in that Section, an amount which bears the same ratio to that fixed-sum Fee as the Cost of the Work in that Section bears to a reasonable estimate of the probable Cost of the Work upon its completion;

- .3 Subtract retainage of «**■**» percent («**■**» %) from that portion of the Work that the Design-Builder self-performs;
- .4 Subtract the aggregate of previous payments made by the Owner;
- .5 Subtract the shortfall, if any, indicated by the Design-Builder in the documentation required by Section A.1.5.1.4 or resulting from errors subsequently discovered by the Owner's auditors in such documentation; and
- .6 Subtract amounts, if any, for which the Owner has withheld or withdrawn a Certificate of Payment as provided in the Section 9.5 of the Agreement.

§ A.1.5.3.3 The Owner and Design-Builder shall agree upon (1) a mutually acceptable procedure for review and approval of payments to the Architect, Consultants, and Contractors and (2) the percentage of retainage held on agreements with the Architect, Consultants, and Contractors, and the Design-Builder shall execute agreements in accordance with those terms.

§ A.1.5.4 Progress Payments—Cost of the Work Plus a Fee with a Guaranteed Maximum Price

§ A.1.5.4.1 Applications for Payment where the Contract Sum is based upon the Cost of the Work Plus a Fee with a Guaranteed Maximum Price 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. The percentage of completion shall be the lesser of (1) the percentage of that portion of the Work which has actually been completed; or (2) the percentage obtained by dividing (a) the expense that has actually been incurred by the Design-Builder on account of that portion of the Work for which the Design-Builder has made or intends to make actual payment prior to the next Application for Payment by (b) the share of the Guaranteed Maximum Price allocated to that portion of the Work in the schedule of values.

§ A.1.5.4.2 Subject to other provisions of the Design-Build Documents, the amount of each progress payment shall be computed as follows:

- .1 Take that portion of the Guaranteed Maximum Price properly allocable to completed Work as determined by multiplying the percentage of completion of each portion of the Work by the share of the Guaranteed Maximum Price allocated to that portion of the Work in the schedule of values. Pending final determination of cost to the Owner of changes in the Work, amounts not in dispute shall be included as provided in Section 6.3.9 of the Agreement.
- .2 Add that portion of the Guaranteed Maximum Price properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work, or if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing;
- .3 Add the Design-Builder's Fee, less retainage of «**■**» percent («**■**» %). The Design-Builder's Fee shall be computed upon the Cost of the Work at the rate stated in Section A.1.4.2 or, if the Design-Builder's Fee is stated as a fixed sum in that Section, shall be an amount that bears the same ratio to that fixed-sum fee as the Cost of the Work bears to a reasonable estimate of the probable Cost of the Work upon its completion;
- .4 Subtract retainage of «**■**» percent («**■**» %) from that portion of the Work that the Design-Builder self-performs;
- .5 Subtract the aggregate of previous payments made by the Owner;
- .6 Subtract the shortfall, if any, indicated by the Design-Builder in the documentation required by Section A.1.5.1.4 to substantiate prior Applications for Payment, or resulting from errors subsequently discovered by the Owner's auditors in such documentation; and
- .7 Subtract amounts, if any, for which the Owner has withheld or nullified a payment as provided in Section 9.5 of the Agreement.

§ A.1.5.4.3 The Owner and Design-Builder shall agree upon (1) a mutually acceptable procedure for review and approval of payments to the Architect, Consultants, and Contractors and (2) the percentage of retainage held on agreements with the Architect, Consultants, and Contractors; and the Design-Builder shall execute agreements in accordance with those terms.

§ A.1.5.5 Final Payment

§ A.1.5.5.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Design-Builder not later than 30 days after the Design-Builder has fully performed the Contract and the requirements of Section 9.10 of the Agreement have been satisfied, except for the Design-Builder's responsibility to correct non-conforming Work discovered after final payment or to satisfy other requirements, if any, which extend beyond final payment.

§ A.1.5.5.2 If the Contract Sum is based on the Cost of the Work, the Owner’s auditors will review and report in writing on the Design-Builder’s final accounting within 30 days after the Design-Builder delivers the final accounting to the Owner. Based upon the Cost of the Work the Owner’s auditors report to be substantiated by the Design-Builder’s final accounting, and provided the other conditions of Section 9.10 of the Agreement have been met, the Owner will, within seven days after receipt of the written report of the Owner’s auditors, either issue a final Certificate for Payment, or notify the Design-Builder in writing of the reasons for withholding a certificate as provided in Section 9.5.1 of the Agreement.

ARTICLE A.2 CONTRACT TIME

§ A.2.1 Contract Time, as defined in the Agreement at Section 1.4.13, is the period of time, including authorized adjustments, for Substantial Completion of the Work.

§ A.2.2 The Design-Builder shall achieve Substantial Completion of the Work not later than « » (« ») days from the date of this Amendment, or as follows:

(Insert number of calendar days. Alternatively, a calendar date may be used when coordinated with the date of commencement. If appropriate, insert requirements for earlier Substantial Completion of certain portions of the Work.)

« »

Portion of Work

Substantial Completion Date

« »

« »

, subject to adjustments of the Contract Time as provided in the Design-Build Documents.

(Insert provisions, if any, for liquidated damages relating to failure to achieve Substantial Completion on time or for bonus payments for early completion of the Work.)

« »

ARTICLE A.3 INFORMATION UPON WHICH AMENDMENT IS BASED

§ A.3.1 The Contract Sum and Contract Time set forth in this Amendment are based on the following:

§ A.3.1.1 The Supplementary and other Conditions of the Contract:

Document

Title

Date

Pages

« »

« »

« »

« »

§ A.3.1.2 The Specifications:

(Either list the specifications here or refer to an exhibit attached to this Amendment.)

« »

Section

Title

Date

Pages

« »

« »

« »

« »

§ A.3.1.3 The Drawings:

(Either list the drawings here or refer to an exhibit attached to this Amendment.)

« »

Number

Title

Date

« »

« »

« »

§ A.3.1.4 The Sustainability Plan, if any:

(If the Owner identified a Sustainable Objective in the Owner’s Criteria, identify the document or documents that comprise the Sustainability Plan by title, date and number of pages, and include other identifying information. The Sustainability Plan identifies and describes the Sustainable Objective; the targeted Sustainable Measures;

implementation strategies selected to achieve the Sustainable Measures; the Owner's and Design-Builder's roles and responsibilities associated with achieving the Sustainable Measures; the specific details about design reviews, testing or metrics to verify achievement of each Sustainable Measure; and the Sustainability Documentation required for the Project, as those terms are defined in Exhibit C to the Agreement.)

Title	Date	Pages
<< >>		

Other identifying information:

<< >>

§ A.3.1.5 Allowances and Contingencies:

(Identify any agreed upon allowances and contingencies, including a statement of their basis.)

.1 Allowances

<< >>

.2 Contingencies

<< >>

§ A.3.1.6 Design-Builder's assumptions and clarifications:

<< >>

§ A.3.1.7 Deviations from the Owner's Criteria as adjusted by a Modification:

<< >>

§ A.3.1.8 To the extent the Design-Builder shall be required to submit any additional Submittals to the Owner for review, indicate any such submissions below:

<< >>

ARTICLE A.4 DESIGN-BUILDER'S PERSONNEL, CONTRACTORS AND SUPPLIERS

§ A.4.1 The Design-Builder's key personnel are identified below:

(Identify name, title and contact information.)

.1 Superintendent

<< >>

.2 Project Manager

<< >>

.3 Others

<< >>

§ A.4.2 The Design-Builder shall retain the following Consultants, Contractors and suppliers, identified below:

(List name, discipline, address and other information.)

<< >>

ARTICLE A.5 COST OF THE WORK

§ A.5.1 Cost To Be Reimbursed as Part of the Contract

§ A.5.1.1 Labor Costs

§ A.5.1.1.1 Wages of construction workers directly employed by the Design-Builder to perform the construction of the Work at the site or, with the Owner's prior approval, at off-site workshops.

§ A.5.1.1.2 With the Owner's prior approval, wages or salaries of the Design-Builder's supervisory and administrative personnel when stationed at the site.

(If it is intended that the wages or salaries of certain personnel stationed at the Design-Builder's principal or other offices shall be included in the Cost of the Work, identify below the personnel to be included, whether for all or only part of their time, and the rates at which their time will be charged to the Work.)

Person Included	Status (full-time/part-time)	Rate (\$0.00)	Rate (unit of time)
<< >>			

§ A.5.1.1.3 Wages and salaries of the Design-Builder's supervisory or administrative personnel engaged at factories, workshops or on the road, in expediting the production or transportation of materials or equipment required for the Work, but only for that portion of their time required for the Work.

§ A.5.1.1.4 Costs paid or incurred by the Design-Builder for taxes, insurance, contributions, assessments and benefits required by law or collective bargaining agreements and, for personnel not covered by such agreements, customary benefits such as sick leave, medical and health benefits, holidays, vacations and pensions, provided such costs are based on wages and salaries included in the Cost of the Work under Section A.5.1.1.

§ A.5.1.1.5 Bonuses, profit sharing, incentive compensation and any other discretionary payments paid to anyone hired by the Design-Builder or paid to the Architect or any Consultant, Contractor or supplier, with the Owner's prior approval.

§ A.5.1.2 Contract Costs. Payments made by the Design-Builder to the Architect, Consultants, Contractors and suppliers in accordance with the requirements of their subcontracts.

§ A.5.1.3 Costs of Materials and Equipment Incorporated in the Completed Construction

§ A.5.1.3.1 Costs, including transportation and storage, of materials and equipment incorporated or to be incorporated in the completed construction.

§ A.5.1.3.2 Costs of materials described in the preceding Section A.5.1.3.1 in excess of those actually installed to allow for reasonable waste and spoilage. Unused excess materials, if any, shall become the Owner's property at the completion of the Work or, at the Owner's option, shall be sold by the Design-Builder. Any amounts realized from such sales shall be credited to the Owner as a deduction from the Cost of the Work.

§ A.5.1.4 Costs of Other Materials and Equipment, Temporary Facilities and Related Items

§ A.5.1.4.1 Costs of transportation, storage, installation, maintenance, dismantling and removal of materials, supplies, temporary facilities, machinery, equipment and hand tools not customarily owned by construction workers that are provided by the Design-Builder at the site and fully consumed in the performance of the Work. Costs of materials, supplies, temporary facilities, machinery, equipment and tools that are not fully consumed shall be based on the cost or value of the item at the time it is first used on the Project site less the value of the item when it is no longer used at the Project site. Costs for items not fully consumed by the Design-Builder shall mean fair market value.

§ A.5.1.4.2 Rental charges for temporary facilities, machinery, equipment and hand tools not customarily owned by construction workers that are provided by the Design-Builder at the site and costs of transportation, installation, minor repairs, dismantling and removal. The total rental cost of any Design-Builder-owned item may not exceed the purchase price of any comparable item. Rates of Design-Builder-owned equipment and quantities of equipment shall be subject to the Owner's prior approval.

§ A.5.1.4.3 Costs of removal of debris from the site of the Work and its proper and legal disposal.

§ A.5.1.4.4 Costs of document reproductions, electronic communications, postage and parcel delivery charges, dedicated data and communications services, teleconferences, Project websites, extranets and reasonable petty cash expenses of the site office.

§ A.5.1.4.5 Costs of materials and equipment suitably stored off the site at a mutually acceptable location, with the Owner's prior approval.

§ A.5.1.5 Miscellaneous Costs

§ A.5.1.5.1 Premiums for that portion of insurance and bonds required by the Design-Build Documents that can be directly attributed to the Contract. With the Owner's prior approval self-insurance for either full or partial amounts of the coverages required by the Design-Build Documents.

§ A.5.1.5.2 Sales, use or similar taxes imposed by a governmental authority that are related to the Work and for which the Design-Builder is liable.

§ A.5.1.5.3 Fees and assessments for the building permit and for other permits, licenses and inspections for which the Design-Builder is required by the Design-Build Documents to pay.

§ A.5.1.5.4 Fees of laboratories for tests required by the Design-Build Documents, except those related to defective or nonconforming Work for which reimbursement is excluded by Section 15.5.3 of the Agreement or by other provisions of the Design-Build Documents, and which do not fall within the scope of Section A.5.1.6.3.

§ A.5.1.5.5 Royalties and license fees paid for the use of a particular design, process or product required by the Design-Build Documents; the cost of defending suits or claims for infringement of patent rights arising from such requirement of the Design-Build Documents; and payments made in accordance with legal judgments against the Design-Builder resulting from such suits or claims and payments of settlements made with the Owner's consent. However, such costs of legal defenses, judgments and settlements shall not be included in the calculation of the Design-Builder's Fee or subject to the Guaranteed Maximum Price. If such royalties, fees and costs are excluded by the second to last sentence of Section 3.1.13.2 of the Agreement or other provisions of the Design-Build Documents, then they shall not be included in the Cost of the Work.

§ A.5.1.5.6 With the Owner's prior approval, costs for electronic equipment and software directly related to the Work.

§ A.5.1.5.7 Deposits lost for causes other than the Design-Builder's negligence or failure to fulfill a specific responsibility in the Design-Build Documents.

§ A.5.1.5.8 With the Owner's prior approval, which shall not be unreasonably withheld, legal, mediation and arbitration costs, including attorneys' fees, other than those arising from disputes between the Owner and Design-Builder, reasonably incurred by the Design-Builder after the execution of the Agreement and in the performance of the Work.

§ A.5.1.5.9 With the Owner's prior approval, expenses incurred in accordance with the Design-Builder's standard written personnel policy for relocation, and temporary living allowances of, the Design-Builder's personnel required for the Work.

§ A.5.1.5.10 That portion of the reasonable expenses of the Design-Builder's supervisory or administrative personnel incurred while traveling in discharge of duties connected with the Work.

§ A.5.1.6 Other Costs and Emergencies

§ A.5.1.6.1 Other costs incurred in the performance of the Work if, and to the extent, approved in advance in writing by the Owner.

§ A.5.1.6.2 Costs incurred in taking action to prevent threatened damage, injury or loss in case of an emergency affecting the safety of persons and property.

§ A.5.1.6.3 Costs of repairing or correcting damaged or nonconforming Work executed by the Design-Builder, Contractors or suppliers, provided that such damaged or nonconforming Work was not caused by negligence or failure to fulfill a specific responsibility of the Design-Builder and only to the extent that the cost of repair or correction is not recovered by the Design-Builder from insurance, sureties, Contractors, suppliers, or others.

§ A.5.1.7 Related Party Transactions

§ A.5.1.7.1 For purposes of Section A.5.1.7, the term “related party” shall mean a parent, subsidiary, affiliate or other entity having common ownership or management with the Design-Builder; any entity in which any stockholder in, or management employee of, the Design-Builder owns any interest in excess of ten percent in the aggregate; or any person or entity which has the right to control the business or affairs of the Design-Builder. The term “related party” includes any member of the immediate family of any person identified above.

§ A.5.1.7.2 If any of the costs to be reimbursed arise from a transaction between the Design-Builder and a related party, the Design-Builder shall notify the Owner of the specific nature of the contemplated transaction, including the identity of the related party and the anticipated cost to be incurred, before any such transaction is consummated or cost incurred. If the Owner, after such notification, authorizes the proposed transaction, then the cost incurred shall be included as a cost to be reimbursed, and the Design-Builder shall procure the Work, equipment, goods or service from the related party, as a Contractor, according to the terms of Section A.5.4. If the Owner fails to authorize the transaction, the Design-Builder shall procure the Work, equipment, goods or service from some person or entity other than a related party according to the terms of Section A.5.4.

§ A.5.2 Costs Not to Be Reimbursed as Part of this Contract

The Cost of the Work shall not include the items listed below:

- .1 Salaries and other compensation of the Design-Builder's personnel stationed at the Design-Builder's principal office or offices other than the site office, except as specifically provided in Section A.5.1.1;
- .2 Expenses of the Design-Builder's principal office and offices other than the site office;
- .3 Overhead and general expenses, except as may be expressly included in Section A.5.1;
- .4 The Design-Builder's capital expenses, including interest on the Design-Builder's capital employed for the Work;
- .5 Except as provided in Section A.5.1.6.3 of this Agreement, costs due to the negligence or failure of the Design-Builder, Contractors and suppliers or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable to fulfill a specific responsibility of the Contract;
- .6 Any cost not specifically and expressly described in Section A.5.1; and
- .7 Costs, other than costs included in Change Orders approved by the Owner, that would cause the Guaranteed Maximum Price to be exceeded.

§ A.5.3 Discounts, Rebates, and Refunds

§ A.5.3.1 Cash discounts obtained on payments made by the Design-Builder shall accrue to the Owner if (1) before making the payment, the Design-Builder included them in an Application for Payment and received payment from the Owner, or (2) the Owner has deposited funds with the Design-Builder with which to make payments; otherwise, cash discounts shall accrue to the Design-Builder. Trade discounts, rebates, refunds and amounts received from sales of surplus materials and equipment shall accrue to the Owner, and the Design-Builder shall make provisions so that they can be obtained.

§ A.5.3.2 Amounts that accrue to the Owner in accordance with Section A.5.3.1 shall be credited to the Owner as a deduction from the Cost of the Work.

§ A.5.4 Other Agreements

§ A.5.4.1 When the Design-Builder has provided a Guaranteed Maximum Price, and a specific bidder (1) is recommended to the Owner by the Design-Builder; (2) is qualified to perform that portion of the Work; and (3) has submitted a bid that conforms to the requirements of the Design-Build Documents without reservations or exceptions, but the Owner requires that another bid be accepted, then the Design-Builder may require that a Change Order be issued to adjust the Guaranteed Maximum Price by the difference between the bid of the person or entity recommended to the Owner by the Design-Builder and the amount of the subcontract or other agreement actually signed with the person or entity designated by the Owner.

§ A.5.4.2 Agreements between the Design-Builder and Contractors shall conform to the applicable payment provisions of the Design-Build Documents, and shall not be awarded on the basis of cost plus a fee without the prior consent of the Owner. If an agreement between the Design Builder and a Contractor is awarded on a cost plus a fee basis, the Design-Builder shall provide in the agreement for the Owner to receive the same audit rights with regard to the Cost of the Work performed by the Contractor as the Owner receives with regard to the Design-Builder in Section A.5.5, below.

§ A.5.4.3 The agreements between the Design-Builder and Architect and other Consultants identified in the Agreement shall be in writing. These agreements shall be promptly provided to the Owner upon the Owner's written request.

§ A.5.5 Accounting Records

The Design-Builder shall keep full and detailed records and accounts related to the cost of the Work and exercise such controls as may be necessary for proper financial management under the Contract and to substantiate all costs incurred. The accounting and control systems shall be satisfactory to the Owner. The Owner and the Owner's auditors shall, during regular business hours and upon reasonable notice, be afforded access to, and shall be permitted to audit and copy, the Design-Builder's records and accounts, including complete documentation supporting accounting entries, books, correspondence, instructions, drawings, receipts, subcontracts, Contractor's proposals, purchase orders, vouchers, memoranda and other data relating to the Contract. The Design-Builder shall preserve these records for a period of three years after final payment, or for such longer period as may be required by law.

§ A.5.6 Relationship of the Parties

The Design-Builder accepts the relationship of trust and confidence established by this Agreement and covenants with the Owner to exercise the Design-Builder's skill and judgment in furthering the interests of the Owner; to furnish efficient construction administration, management services and supervision; to furnish at all times an adequate supply of workers and materials; and to perform the Work in an expeditious and economical manner consistent with the Owner's interests.

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

« »

OWNER *(Signature)*
« »

(Printed name and title)

« »

DESIGN-BUILDER *(Signature)*
« »

(Printed name and title)

DRAFT AIA® Document A141™ – 2014

Exhibit B

Insurance and Bonds

for the following PROJECT:

(Name and location or address)

«»
« »

THE OWNER:

(Name, legal status and address)

« »« »
« »

THE DESIGN-BUILDER:

(Name, legal status and address)

« »« »
« »

THE AGREEMENT

This Insurance Exhibit is part of the accompanying agreement for the Project, between the Owner and the Design-Builder (hereinafter, the Agreement), dated the «» day of «» in the year «».

(In words, indicate day, month and year.)

TABLE OF ARTICLES

B.1 GENERAL

B.2 DESIGN BUILDER'S INSURANCE AND BONDS

B.3 OWNER'S INSURANCE

B.4 SPECIAL TERMS AND CONDITIONS

ARTICLE B.1 GENERAL

The Owner and Design-Builder shall purchase and maintain insurance and provide bonds as set forth in this Exhibit B. Where a provision in this Exhibit conflicts with a provision in the Agreement into which this Exhibit is incorporated, the provision in this Exhibit will prevail.

ARTICLE B.2 DESIGN BUILDER'S INSURANCE AND BONDS

§ B.2.1 The Design-Builder shall purchase and maintain the following types and limits of insurance from a company or companies lawfully authorized to do business in the jurisdiction where the Project is located. The Design-Builder shall maintain the required insurance until the expiration of the period for correction of Work as set forth in Section 11.2.2.1 of the Agreement, unless a different duration is stated below:

(If the Design-Builder is required to maintain insurance for a duration other than the expiration of the period for correction of Work, state the duration.)

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

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

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§ B.2.1.1 Commercial General Liability with policy limits of not less than « » (\$ « ») for each occurrence and « » (\$ « ») in the aggregate providing coverage for claims including

- .1 damages because of bodily injury, sickness or disease, including occupational sickness or disease, and death of any person;
- .2 personal injury;
- .3 damages because of injury to or destruction of tangible property;
- .4 bodily injury or property damage arising out of completed operations; and
- .5 contractual liability applicable to the Design-Builder's obligations under Section 3.1.14 of the Agreement.

§ B.2.1.2 Automobile Liability covering vehicles owned by the Design-Builder and non-owned vehicles used by the Design-Builder with policy limits of not less than « » (\$ « ») per claim and « » (\$ « ») in the aggregate for bodily injury, death of any person, and property damage arising out of the ownership, maintenance and use of those motor vehicles specified in this Section B.2.1.2, along with any other statutorily required automobile coverage.

§ B.2.1.3 The Design-Builder may achieve the required limits and coverage for Commercial General Liability and Automobile Liability through a combination of primary and excess liability insurance, provided such primary and excess insurance policies result in the same or greater coverage as those required under Sections B.2.1.1 and B.2.1.2.

§ B.2.1.4 Workers' Compensation at statutory limits.

§ B.2.1.5 Employers' Liability with policy limits as provided below:

§ B.2.1.6 Professional Liability covering negligent acts, errors and omissions in the performance of professional services, with policy limits of not less than « » (\$ « ») per claim and « » (\$ « ») in the aggregate.

§ B.2.1.7 Pollution Liability covering performance of the Work, with policy limits of not less than « » (\$ « ») per claim and « » (\$ « ») in the aggregate.

§ B.2.1.7.1 The Design-Builder may obtain a combined Professional Liability and Pollution Liability policy to satisfy the requirements set forth in Sections B.2.1.6 and B.2.1.7, with combined policy limits that are not less than « » (\$ « ») per claim and « » (\$ « ») in the aggregate.

§ B.2.1.8 The Design-Builder shall provide written notification to the Owner of the cancellation or expiration of any insurance required by this Article B.2. The Design-Builder shall provide such written notice within five (5) business days of the date the Design-Builder is first aware of the cancellation or expiration, or is first aware that the cancellation or expiration is threatened or otherwise may occur, whichever comes first.

§ B.2.1.9 **Additional Insured Obligations.** The Owner and its consultants and contractors shall be additional insureds on the Design-Builder's primary and excess insurance policies for Commercial General Liability, Automobile Liability and Pollution Liability. The additional insured coverage shall be primary and non-contributory to any of the Owner's insurance policies. The additional insured coverage shall apply to both ongoing operations and completed operations. The policy limits applicable to the additional insureds shall be the same amount applicable to the named insured or, if the policy provides otherwise, policy limits not less than the amounts required under this Agreement.

§ B.2.1.10 **Certificates of Insurance.** The Design-Builder shall provide certificates of insurance acceptable to the Owner evidencing compliance with the requirements in this Article B.2: (1) prior to commencement of the Work; (2) upon renewal or replacement of each required policy of insurance; and (3) upon Owner's written request. An additional certificate evidencing continuation of liability coverage, including coverage for completed operations, shall be submitted with the final Application for Payment as required by Section 9.10.2 of the Agreement and thereafter upon renewal or replacement of such coverage until the expiration of the time required by Section B.2.1. The certificates will show the Owner and its consultants and contractors as additional insureds on the Design-Builder's primary and excess insurance policies for Commercial General Liability, Automobile Liability, and Pollution Liability.

Information concerning reduction of coverage on account of revised limits, claims paid under the General Aggregate or both, shall be furnished by the Design-Builder with reasonable promptness.

§ B.2.2 Performance Bond and Payment Bond

The Design-Builder shall provide surety bonds as follows:
(Specify type and penal sum of bonds.)

Type	Penal Sum (\$0.00)
<< >>	

§ B.2.2.1 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Agreement, the Design-Builder shall promptly furnish a copy of the bonds or shall permit a copy to be made.

ARTICLE B.3 OWNER'S INSURANCE

§ B.3.1 Owner's Liability Insurance

The Owner shall be responsible for purchasing and maintaining the Owner's usual liability insurance.

§ B.3.2 Property Insurance

§ B.3.2.1 Unless otherwise provided, at the time of execution of the Design-Build Amendment, the Owner shall purchase and maintain, in a company or companies lawfully authorized to do business in the jurisdiction where the Project is located, property insurance written on a builder's risk "all-risk" or equivalent policy form in the amount of the initial Contract Sum, plus the value of subsequent Modifications and cost of materials supplied or installed by others, comprising the total value for the entire Project at the site on a replacement cost basis without optional deductibles. If any construction that is part of the Work shall commence prior to execution of the Design-Build Amendment, the Owner shall, prior to commencement of construction, purchase and maintain property insurance as described above in an amount sufficient to cover the total value of the Work at the site on a replacement cost basis without optional deductibles. The insurance required under this section shall include interests of the Owner, Design-Builder, Architect, Consultants, Contractors, and Subcontractors in the Project. The property insurance shall be maintained, unless otherwise provided in the Design-Build Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of the insurance, until the Owner has issued a Certificate of Substantial Completion in accordance with Section 9.8 of the Agreement. Unless the parties agree otherwise, upon issuance of a Certificate of Substantial Completion, the Owner shall replace the insurance policy required under this Section B.3.2 with another property insurance policy written for the total value of the Project that shall remain in effect until expiration of the period for correction of the Work set forth in Section 11.2.2 of the Agreement.

§ B.3.2.1.1 The insurance required under Section B.3.2.1 shall include, without limitation, insurance against the perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood, windstorm, falsework, testing and startup, temporary buildings and debris removal, including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for the Design-Builder's services and expenses required as a result of such insured loss.

§ B.3.2.1.2 If the insurance required under Section B.3.2.1 requires deductibles, the Owner shall pay costs not covered because of such deductibles.

§ B.3.2.1.3 The insurance required under Section B.3.2.1 shall cover portions of the Work stored off the site, and also portions of the Work in transit.

§ B.3.2.1.4 Partial occupancy or use in accordance with Section 9.9 of the Agreement shall not commence until the insurance company or companies providing the insurance required under Section B.3.2.1 have consented to such partial occupancy or use by endorsement or otherwise. The Owner and the Design-Builder shall take reasonable steps to obtain consent of the insurance company or companies and shall, without mutual written consent, take no action with respect to partial occupancy or use that would cause cancellation, lapse or reduction of insurance.

§ B.3.2.2 Boiler and Machinery Insurance. The Owner shall purchase and maintain boiler and machinery insurance, which shall specifically cover commissioning, testing, or breakdown of equipment required by the Work, if not covered by the insurance required in Section B.3.2.1. This insurance shall include the interests of the Owner,

Design-Builder, Architect, Consultants, Contractor and Subcontractors in the Work, and the Owner and Design-Builder shall be named insureds.

§ B.3.2.3 If the Owner does not intend to purchase the insurance required under Sections B.3.2.1 and B.3.2.2 with all of the coverages in the amounts described above, the Owner shall inform the Design-Builder in writing prior to any construction that is part of the Work. The Design-Builder may then obtain insurance that will protect the interests of the Owner, Design-Builder, Architect, Consultants, Contractors, and Subcontractors in the Work. The cost of the insurance shall be charged to the Owner by an appropriate Change Order. If the Owner does not provide written notice, and the Design-Builder is damaged by the failure or neglect of the Owner to purchase or maintain insurance as described above, the Owner shall bear all reasonable costs and damages attributable thereto.

§ B.3.2.4 Loss of Use Insurance. At the Owner's option, the Owner may purchase and maintain insurance to insure the Owner against loss of use of the Owner's property due to fire or other hazards, however caused. The Owner waives all rights of action against the Design-Builder for loss of use of the Owner's property, including consequential losses due to fire or other hazards covered under the property insurance required under this Exhibit B to the Agreement.

§ B.3.2.5 If during the Project construction period the Owner insures properties, real or personal or both, at or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, the Owner shall waive all rights in accordance with the terms of Section B.3.2.7 for damages caused by fire or other causes of loss covered by this separate property insurance. All separate policies shall provide this waiver of subrogation by endorsement or otherwise.

§ B.3.2.6 Before an exposure to loss may occur, the Owner shall file with the Design-Builder a copy of each policy that includes insurance coverages required by this Section B.3.2. Each policy shall contain all generally applicable conditions, definitions, exclusions and endorsements related to this Project. The Owner shall provide written notification to the Design-Builder of the cancellation or expiration of any insurance required by this Article B.3. The Owner shall provide such written notice within five (5) business days of the date the Owner is first aware of the cancellation or expiration, or is first aware that the cancellation or expiration is threatened or otherwise may occur, whichever comes first.

§ B.3.2.7 Waivers of Subrogation. The Owner and Design-Builder waive all rights against (1) each other and any of their consultants, subconsultants, contractors and subcontractors, agents and employees, each of the other, and (2) any separate contractors described in Section 5.13 of the Agreement, if any, and any of their subcontractors, sub-subcontractors, agents and employees, for damages caused by fire or other causes of loss to the extent covered by property insurance obtained pursuant to Section B.3.2 or other property insurance applicable to the Work and completed construction, except such rights as they have to proceeds of such insurance held by the Owner as fiduciary. The Owner or Design-Builder, as appropriate, shall require of the separate contractors described in Section 5.13 of the Agreement, if any, and the subcontractors, sub-subcontractors, agents and employees of any of them, by appropriate agreements, written where legally required for validity, similar waivers each in favor of the other parties enumerated herein. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

§ B.3.2.8 A loss insured under the Owner's property insurance shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section B.3.2.10. The Design-Builder shall pay the Architect, Consultants and Contractors their just shares of insurance proceeds received by the Design-Builder, and by appropriate agreements, written where legally required for validity, the Design-Builder shall require the Architect, Consultants and Contractors to make payments to their consultants and subcontractors in similar manner.

§ B.3.2.9 If required in writing by a party in interest, the Owner as fiduciary shall, upon occurrence of an insured loss, give bond for proper performance of the Owner's duties. The cost of required bonds shall be charged against proceeds received as fiduciary. The Owner shall deposit in a separate account proceeds so received, which the Owner shall distribute in accordance with such agreement as the parties in interest may reach, or as determined in accordance with the method of binding dispute resolution selected in the Agreement between the Owner and Design-Builder. If after such loss no other special agreement is made and unless the Owner terminates the Contract for convenience,

replacement of damaged property shall be performed by the Design-Builder after notification of a Change in the Work in accordance with Article 6 of the Agreement.

§ B.3.2.10 The Owner as fiduciary shall have power to adjust and settle a loss with insurers unless one of the parties in interest shall object in writing within five days after occurrence of a loss to the Owner's exercise of this power. If an objection is made, the dispute shall be resolved in the manner selected by the Owner and Design-Builder as the method of binding dispute resolution in the Agreement. If the Owner and Design-Builder have selected arbitration as the method of binding dispute resolution, the Owner as fiduciary shall make settlement with insurers or, in the case of a dispute over distribution of insurance proceeds, in accordance with the directions of the arbitrators.

ARTICLE B.4 SPECIAL TERMS AND CONDITIONS

Special terms and conditions that modify this Insurance and Bonds Exhibit, if any, are as follows:

« »

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Exhibit C

Sustainable Projects

for the following PROJECT:

(Name and location or address)

<>
< >

THE OWNER:

(Name, legal status and address)

<><>
< >

THE DESIGN-BUILDER:

(Name, legal status and address)

<><>
< >

THE AGREEMENT

This Sustainable Projects Exhibit is part of the accompanying agreement for the Project between the Owner and Design-Builder (hereinafter, the Agreement) dated the <> day of <> in the year <>.

(In words, indicate day, month and year.)

TABLE OF ARTICLES

C.1 GENERAL PROVISIONS

C.2 DESIGN-BUILDER

C.3 OWNER

C.4 CLAIMS AND DISPUTES

C.5 MISCELLANEOUS PROVISIONS

C.6 SPECIAL TERMS AND CONDITIONS

ARTICLE C.1 GENERAL PROVISIONS

§ C.1.1 This Exhibit, in conjunction with the Sustainability Plan and other Design-Build Documents, establishes requirements of the Owner, and the services to be provided by the Design-Builder, when the Project includes a Sustainable Objective. Except in the case of a conflict with the Owner's Criteria, where a provision in this Exhibit conflicts with a provision in the Agreement into which this Exhibit is incorporated, the provision in this Exhibit will prevail.

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

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

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§ C.1.2 Definitions

§ C.1.2.1 Sustainable Objective. The Sustainable Objective is the Owner's goal of incorporating Sustainable Measures into the design, construction, maintenance and operations of the Project to achieve a Sustainability Certification or other benefit to the environment, to enhance the health and well-being of building occupants, or to improve energy efficiency. If not set forth in the Owner's Criteria, the Sustainable Objective will be identified in the Sustainability Plan.

§ C.1.2.2 Sustainable Measure. A Sustainable Measure is a specific design or construction element, or post occupancy use, operation, maintenance or monitoring requirement, that must be completed in order to achieve the Sustainable Objective. The Owner and Design-Builder shall each have responsibility for the Sustainable Measure(s) allocated to them in the Sustainability Plan.

§ C.1.2.3 Sustainability Plan. The Sustainability Plan is a Design-Build Document that identifies and describes: the Sustainable Objective; the targeted Sustainable Measures; implementation strategies selected to achieve the Sustainable Measures; the Owner's and Design-Builder's roles and responsibilities associated with achieving the Sustainable Measures; the specific details about design reviews; testing or metrics to verify achievement of each Sustainable Measure; and the Sustainability Documentation required for the Project.

§ C.1.2.4 Sustainability Certification. The Sustainability Certification is the initial third-party certification of sustainable design, construction, or environmental or energy performance, such as LEED®, Green Globes™, Energy Star or another rating or certification system, that may be designated as the Sustainable Objective or part of the Sustainable Objective for the Project. The term Sustainability Certification shall not apply to any recertification or certification occurring subsequent to the initial certification.

§ C.1.2.5 Sustainability Documentation. The Sustainability Documentation includes all documentation related to the Sustainable Objective, or to a specific Sustainable Measure, that the Owner or Design-Builder is required to prepare in accordance with the Design-Build Documents. Responsibility for preparation of specific portions of the Sustainability Documentation will be allocated among the Owner and Design-Builder in the Sustainability Plan and may include documentation required by the Certifying Authority.

§ C.1.2.6 Certifying Authority. The Certifying Authority is the entity that establishes criteria for achievement of a Sustainability Certification and is authorized to grant or deny a Sustainability Certification.

ARTICLE C.2 DESIGN-BUILDER

§ C.2.1 Scope of Design-Builder's Sustainability Services Prior to Execution of the Design-Build Amendment

§ C.2.1.1 The Design-Builder shall provide the Sustainability Services described in this Section C.2.1 in conjunction with the Work described in Article 4 of the Agreement.

§ C.2.1.2 Sustainability Certification Agreements. If the anticipated Sustainable Objective set forth in the Owner's Criteria includes a Sustainability Certification, the Design-Builder shall provide the Owner with copies of all agreements required by the Certifying Authority to register the Project and pursue the Sustainability Certification. The Owner and Design-Builder will review and confirm that the terms of those agreements are acceptable to the Owner before moving forward with the Sustainability Services under this Article C.2. The Owner agrees to execute all documents required by the Certifying Authority to be executed by the Owner; including any documentation required to establish the authority of the Design-Builder, the Architect, Contractor, or a Consultant, as an agent of the Owner for the limited purpose of pursuing the Sustainability Certification.

§ C.2.1.3 Preliminary Design

§ C.2.1.3.1 Sustainability Workshop. Prior to the conclusion of Preliminary Design, the Design-Builder, and as necessary the Design-Builder's Architect, Contractors, and Consultants, shall conduct a Sustainability Workshop with the Owner and, as requested by the Design-Builder, with the Owner's consultants, during which the participants will: review and discuss potential Sustainability Certifications; establish the Sustainable Objective; discuss potential Sustainable Measures to be targeted; examine strategies for implementation of the Sustainable Measures; and discuss the potential impact of the Sustainable Measures on the Project schedule and on the Owner's program and budget.

§ C.2.1.3.2 Sustainability Plan

§ C.2.1.3.2.1 Following the Sustainability Workshop, the Design-Builder shall prepare a Sustainability Plan based on the Sustainable Objective and targeted Sustainable Measures.

§ C.2.1.3.2.2 The Design-Builder shall submit the proposed Sustainability Plan to the Owner as part of the Design-Builder's submission of the Preliminary Design in accordance with Section 4.3.1 of the Agreement. The Sustainability Plan shall not change the Owner's Criteria unless the Owner and Design-Builder execute a Modification reflecting any such change.

§ C.2.1.4 Design-Builder's Proposal

§ C.2.1.4.1 As part of the Design-Builder's submission of the Design-Builder's Proposal, in accordance with Section 4.4.1 of the Agreement, the Design-Builder shall advise the Owner of any adjustments to the Sustainability Plan.

§ C.2.1.4.2 If the Owner and Design-Builder agree upon the Design-Builder's Proposal, including the Sustainability Plan, the Owner and Design-Builder shall include the Sustainability Plan in the Design-Build Amendment executed in accordance with Section 4.4.3 of the Agreement.

§ C.2.2 Work Following Execution of the Design-Build Amendment

§ C.2.2.1 The Design-Builder shall perform those Sustainable Measures identified as the responsibility of the Design-Builder in the approved Sustainability Plan and any approved changes to the Sustainability Plan.

§ C.2.2.2 Construction Documents. The Construction Documents prepared by the Design-Builder shall incorporate the Sustainable Measures identified in the Sustainability Plan, as appropriate.

§ C.2.2.3 As part of the Sustainable Measures, the Work may require the use of materials and equipment that have had limited testing or verification of performance. The Design-Builder may be unable to determine whether the materials or equipment will perform as represented by the manufacturer or supplier. The Design-Builder shall discuss with the Owner the proposed use of such materials or equipment, and potential effects on the Sustainable Objective that may occur if the materials or equipment fail to perform in accordance with the manufacturer's or supplier's representations. The Owner will render a written decision regarding the use of such materials or equipment in a timely manner. In the event the Owner elects to proceed with the use of such materials or equipment, the Design-Builder shall be permitted to rely on the manufacturer's or supplier's representations and shall not be responsible for any damages arising from failure of the material or equipment to perform in accordance with the manufacturer's or supplier's representations.

§ C.2.3 Construction Phase

§ C.2.3.1 The Design-Builder shall meet with the Owner to discuss alternatives in the event the Owner recognizes a condition that will affect achievement of a Sustainable Measure or achievement of the Sustainable Objective. If any condition is discovered by, or made known to, the Design-Builder that will adversely affect the Design-Builder's achievement of a Sustainable Measure for which the Design-Builder is responsible pursuant to the Sustainability Plan, the Design-Builder will promptly provide notice to the Owner and meet with the Owner to discuss alternatives to remedy the condition.

§ C.2.3.2 The Design-Builder shall be responsible for preparing and completing the Sustainability Documentation required by the Design-Build Documents, including any Sustainability Documentation required to be submitted after Substantial Completion.

§ C.2.4 Waste Management

The Design-Builder, in accordance with the Design-Build Documents, shall prepare and submit to the Owner a construction waste management and disposal plan setting forth the procedures and processes for salvaging, recycling or disposing of construction waste generated from the Project. The Design-Builder shall recycle, reuse, remove or dispose of materials as required by the Design-Build Documents.

§ C.2.5 Substantial Completion

Verification that the Project has achieved the Sustainable Objective, or the actual achievement of the Sustainable Objective, shall not be a condition precedent to issuance of a Certificate of Substantial Completion in accordance with Section 9.8.5 of the Agreement. Except for that portion of the Sustainability Documentation that by its nature must be provided after Substantial Completion, the Design-Builder shall submit to the Owner the Sustainability Documentation required from the Design-Builder by the Design-Build Documents no later than the date of Substantial Completion.

§ C.2.6 Final Completion

§ C.2.6.1 Verification that the Project has achieved the Sustainable Objective, or the actual achievement of the Sustainable Objective, shall not be a condition precedent to issuance of the final Certificate for Payment in accordance with Section 9.10.1 of the Agreement.

§ C.2.6.2 In accordance with Section 9.10.2 of the Agreement, all Sustainability Documentation required from the Design-Builder by the Design-Build Documents shall be submitted to the Owner before final payment or any remaining retained percentage shall become due.

§ C.2.7 Project Registration and Submissions of Sustainability Documentation to the Certifying Authority

§ C.2.7.1 If the Sustainable Objective includes a Sustainability Certification, the Design-Builder shall perform the services set forth in this Section C.2.7.

§ C.2.7.2 The Design-Builder shall register the Project with the Certifying Authority. Registration fees and any other fees charged by the Certifying Authority, and paid by the Design-Builder, shall be a reimbursable expense.

§ C.2.7.3 The Design-Builder shall collect, organize and manage the Sustainability Documentation; and submit the Sustainability Documentation to the Certifying Authority as required for the Sustainability Certification process.

§ C.2.7.4 Subject to Section C.3.4 and provided the Design-Builder receives timely notice from the Owner or Certifying Authority, the Design-Builder shall prepare and file necessary documentation with the Certifying Authority to appeal a ruling or other interpretation denying a requirement, prerequisite, credit or point necessary to achieve the Sustainability Certification.

§ C.2.7.5 The Design-Builder shall prepare and submit the application for certification of the Project to the Certifying Authority, including any required supporting documentation, in accordance with the Sustainability Plan.

§ C.2.7.6 The Design-Builder shall prepare responses to, and submit additional documentation required by, comments or questions received from the Certifying Authority.

§ C.2.7.7 Any certification, declaration or affirmation the Design-Builder makes to the Certifying Authority shall not constitute a warranty or guarantee to the Owner or the Owner's contractors or consultants.

§ C.2.8 Copyrights and Licenses

§ C.2.8.1 Solely for the purpose of obtaining or maintaining the Sustainability Certification, the Design-Builder grants to the Owner a nonexclusive license to submit the Design-Builder's Instruments of Service, directly or through third parties, to the Certifying Authority to comply with the requirements imposed by the Certifying Authority and further grants the Owner a nonexclusive license to allow the Certifying Authority to publish the Instruments of Service in accordance with the policies and agreements required by the Certifying Authority. The licenses granted in this Section C.2.8 are valid only if the Owner substantially performs its obligations under the Agreement, including prompt payment of all sums when due.

§ C.2.8.2 The Design-Builder and the Owner warrant that in transmitting Instruments of Service, or any other information, the transmitting party is the copyright owner of such information or has permission from the copyright owner to transmit such information for its use on the Project and to allow the Certifying Authority to publish the Instruments of Service, or any other information, in accordance with the policies and agreements required by the Certifying Authority.

§ C.2.8.3 Submission or distribution of Instruments of Service to meet requirements of a Certifying Authority, in connection with the Project, is not to be construed as publication in derogation of the reserved rights of the Design-Builder or those of the Architect, Consultants and Contractors.

ARTICLE C.3 OWNER

§ C.3.1 The Owner shall perform those Sustainable Measures identified as the responsibility of the Owner in the Sustainability Plan, or as otherwise required by the Design-Build Documents. The Owner shall require that each of its separate contractors and consultants performs the separate contractor's or consultant's services in accordance with the Sustainability Plan.

§ C.3.2 The Owner shall provide to the Design-Builder information requested by the Design-Builder that is reasonably relevant and necessary for achievement of the Sustainable Objective.

§ C.3.3 Unless the Design-Build Documents provide otherwise, the Owner shall provide the services of a commissioning agent who shall be responsible for commissioning of the Project.

§ C.3.4 The Owner shall be responsible for preparing, filing, and prosecuting appeals to the Certifying Authority, or taking any other actions determined by the Owner to be necessary or desirable, arising from the revocation or reduction of an awarded Sustainability Certification.

§ C.3.5 The Owner shall comply with the requirements of the Certifying Authority as they relate to the ownership, operation and maintenance of the Project both during construction and after completion of the Project.

ARTICLE C.4 CLAIMS AND DISPUTES

Waiver of Consequential Damages Relating to the Sustainable Objective. The Owner and Design-Builder waive claims against each other for consequential damages resulting from the failure of the Project to achieve the Sustainable Objective or one or more of the Sustainable Measures, including unachieved energy savings, unintended operational expenses, lost financial or tax incentives, or unachieved gains in worker productivity.

ARTICLE C.5 MISCELLANEOUS PROVISIONS

The Owner and Design-Builder acknowledge that achieving the Sustainable Objective is dependent on many factors beyond their control, such as the Owner's use and operation of the Project or the work or services provided by the Owner's separate contractors or consultants; or interpretation of credit requirements by a Certifying Authority. Accordingly, the Design-Builder does not warrant or guarantee that the Project will achieve the Sustainable Objective.

ARTICLE C.6 SPECIAL TERMS AND CONDITIONS

Special terms and conditions that modify this Sustainable Projects Exhibit, if any, are as follows:

<< >>

DRAFT AIA® Document A201™ – 2017

General Conditions of the Contract for Construction

for the following PROJECT:

(Name and location or address)

<< >>
<< >>

THE OWNER:

(Name, legal status and address)

<< >>< >>
<< >>

THE ARCHITECT:

(Name, legal status and address)

<< >>< >>
<< >>

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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.



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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.

GENERAL CONDITIONS

The Work of this Contract shall be subject to the American Institute of Architects Document A201, "General Conditions of the Contract for Construction", herein referred to as the General Conditions.

SUPPLEMENTARY CONDITIONS

The supplementary Conditions contain changes and additions to the General Conditions. Where any part of the General Conditions is modified or voided by the Supplementary Conditions, the remaining unaltered provisions shall remain in effect.

ARTICLE 1 Make the following changes:

1.2.3 **Add the following:** When applied to materials and equipment required for the Work, the words "furnish", "install" and "provide" shall mean the following:

- .1 The word "provide" shall mean to furnish, pay for, deliver, install, adjust, clean and otherwise make materials and equipment fit and ready for their intended use.
- .2 The word "furnish" shall mean to secure, pay for, deliver to site, unload and uncrate materials and equipment.
- .3 The word "install" shall mean to place in position, incorporate in the work, adjust, clean, make fit and ready for use and perform all services except those included under the term "furnish".
- .4 The phrase "furnish and install" shall be equivalent to the word "provide". Each shall be interpreted to mean "the Contractor shall furnish all labor, material and equipment and install...".
- .5 "As required" shall mean as required to produce a fully completed project or result to the satisfaction of the Architect.
- .6 Where discrepancies or conflicts occur:
 - .1 Amendments and Addenda shall take precedence over the Specifications.
 - .2 The Specifications shall take precedence over the Drawings.
 - .3 Stated dimensions shall take precedence over scaled dimensions.
 - .4 Large-scale detail drawings shall take precedence over small-scale drawings.
 - .5 Schedules shall take precedence over other data on the drawings.
- .7 In case of a difference between Drawings or Specifications or within either document itself in describing the Work, the better quality, greater quantity or costlier work will be assumed to be and shall be included in the Contract price. The Contractor shall not proceed with such work until the Architect has been contacted for clarification and proper direction.
- .8 Instructions or specifications of a particular manufacturer as referred to herein shall be binding as a part of this Specification. Obtain such written instructions and maintain on the job with the Specification.
- .9 Schedules of materials in various sections of the Specifications are furnished to assist the Contractor. Contractor shall verify the schedules with the Drawings and shall provide any additional materials indicated on the Drawings but not included in the schedules. The greater quantity or highest quality will govern.

Add the following:

- 1.2.4 All work shown or referred to in the Contract Documents shall be included in the Contract excepting those items which are specifically noted as being "provided under another contract" or "provided by the Owner", or "not in contract (NIC)".
- 1.2.5 Parties to the Contract shall not take advantage of obvious error or apparent discrepancy in Contract Documents. Notice of discovered error or discrepancy shall immediately be given in writing to the Architect to make such corrections and interpretations as he may deem necessary for completion of the work in a satisfactory and acceptable manner.

ARTICLE 2 Make the following changes:

- 2.3.6 **Revise to read as follows:** "Contractor shall be furnished up to three (3) sets of Contract Drawings and Specifications, and two (2) copies of each drawing which is issued after the date of the Contract. The Contractor shall pay costs of reproduction for any additional copies of Drawings or Specifications he requires."

ARTICLE 3 Make the following changes:

Add the following:

- 3.4.4 Should the Contractor wish to substitute another product or method for products or methods specified or shown in the Contract Documents, whether specified or shown in Contract Documents, whether or not such phrases as "equal to" or "based on" are used, he shall apply in writing for approval. He shall enclose such data as Architect requires to evaluate products. The Architect's decision shall be final. Contractor is responsible for space requirements of substitutions, he shall execute necessary changes in adjacent and relocated situations, he shall execute necessary changes in adjacent and relocated work which are due to such substitutions, without additional cost and he shall be responsible for delays required for evaluation of proposed substitutions.
- 3.5.3 Project Warranty: Unless otherwise specified, Contractor shall warrant (guaranty) all work against defects resulting from the use of material, workmanship or equipment which is inferior, defective or not in accordance with the terms of the Contract. This warranty, unless stated otherwise in a given section of the Specifications, shall be for a period of one (1) year from the date of issuance of the Certificate of Substantial Completion for the Project.
- 3.5.4 Specified Product Warranty: Issued by a manufacturer or fabricator for compliance with requirements of the Contract Documents. Refer to sections of Specifications for requirements of specified warranties.
- 3.5.5 Coincidental Product Warranty: Available on a product incorporated into the work, by virtue of manufacturer's publication of warranty without regard for application requirement, a non-specified warranty. Contractor shall identify such warranties as they apply.
- 3.5.6 Warranty Obligations

- .1 Contractor shall restore or remove-and-replace warranted work to its originally specified condition, at such time during warranty as it does not comply with or fulfill terms of warranty.
- .2 Contractor shall restore or remove-and-replace other work which has been damaged by failure of warranted work, or which must be removed and replaced to gain access to warranted work.
- .3 Cost of restoration or removal-and-replacement is Contractor's obligation, without regard to whether Owner has already benefited from use of failing work.
- .4 Except as otherwise indicated or required by governing regulations, warranties do not cover consequential damage to property other than the Work of the Contract.
- .5 Upon restoration or removal-and-replacement of warranted work which has failed, Contractor shall reinstate the warranty by issuing newly executed form, for at least the remaining period of time of the original warranty, but for not less than half of the original warranty period.
- .6 Warranties and warranty periods shall not diminish implied warranties, and shall not deprive Owner of actions, rights and remedies otherwise available if the Contractor fails to fulfill the requirements of the Contract Documents.
- .7 Owner reserves the right to reject coincidental product warranties which conflict with or are less than the requirements of the Contract Documents.

3.5.7 Contractor shall furnish fully executed warranties to Owner in accordance with the General Conditions and Section 017700.

3.6 **Add the following:** No amount shall be included in the bid for State Sales Tax or for Federal Excise Tax on materials or supplies purchased for this project. The Owner will supply tax exempt number.

3.7.1 **Add the following:** The Contractor shall pay costs charged by utility companies for service connections, inspections and tests, and related utility company fees normally assessed as part of the construction process.

ARTICLE 4 Make the following changes:

4.2.13 Add to the first sentence, after "...relating to aesthetic effect..."

"and except for claims which have been waived by making or acceptance of final payment as provided by Subparagraphs 9.10.3 and 9.10.4,"

Add the following:

4.3 The provisions of Article 15 notwithstanding, the Contractor expressly agrees to joinder in arbitration proceedings between Owner/Architect upon specific written request of the Owner. This agreement shall be valid with the Architect's acceptance of an equal provision in their respective contracts.

ARTICLE 6 Add the following:

6.3.1 In a dispute between the Owner and the Contractor concerning rubbish and orderliness on the site, the Owner may have the rubbish removed and charge the cost to the Contractor. Upon written notification from the Architect that the project requires cleaning, the

Contractor shall within 24 hours remove all rubbish and hazards from the project and shall arrange his material and equipment in an orderly manner on the site. If this cleaning is not completed within 24 hours, the Owner may engage labor to clean up the projects to his satisfaction and deduct the costs from any monies due the Contractor.

ARTICLE 7 Add the following:

7.2.2 The Contractor's proposal for changes in the Work shall be itemized completely and in detail and shall include material costs and quantities, labor wages, time, insurance, pensions and equipment rental other than small tools, and the number of additional calendar days, if any, which are required to complete the Work.

Where unit prices have been established, the proposal shall state the quantity involved and the applicable unit price.

7.5 Allowance for Overhead and Profit

7.5.1 The allowance for overhead and profit is compensation for administration, superintendence, materials for temporary structures, additional premiums on bonds and the use of small tools.

7.5.2 For additions, deletions or other changes in the Work ordered under method 7.3.3.3, the Contractor may apply an allowance of up to fifteen percent (15%) for profit and overhead to the net cost of the work actually performed by him.

7.5.3 Work to be performed by a subcontractor may include an allowance for the subcontractor's overhead and profit not to exceed fifteen percent (15%) of the net cost. The Contractor is permitted up to a **ten percent (10%)** allowance to be applied against the net cost to a subcontractor. In no case shall the total allowance exceed twenty-five percent (25%) of the net cost of work performed by the subcontractor.

7.5.4 The Contractor's allowance of up to ten percent (10%) on changes involving more than one (1) subcontractor shall be applied only to the combined net of cost additions and deductions of all subcontractors.

7.5.5 There shall be no allowance for overhead and profit for the Contractor or any subcontractor on changes resulting in a net deduction.

7.5.6 The provisions of this Article shall apply only to subcontractors as defined in Article 5. Allowance for overhead and profit will be accepted only for those who are direct subcontractors.

ARTICLE 8 Add the following:

8.3.4 No extension of time will be allowed for adverse weather conditions unless the number of days of inclement weather is substantially greater or conditions substantially more severe than the average for the calendar period as recorded by a recognized weather observation agency.

ARTICLE 9 Make the following changes:

9.3.1 **Revise** “ten days” to read “fifteen (15) days”.

Add the following:

9.3.1.3 During progress of the Work, the Owner will pay Contractor ninety-five percent (95%) of the total amount of each monthly payment due. The remaining five percent (5%) will be retained by the Owner until the Project is substantially completed. There will be no further reduction considered until final acceptance of the Project in accordance with the Contract Documents.

9.3.2 **Add the following:** If the Contractor does not submit evidence of payment to vendor for material and equipment stored, the Architect will recommend deduction of the amount previously allowed for the items stored from the current or subsequent Application for Payment.

Add the following:

9.3.2.1 Contractor may include in Application for Payment the delivered cost of equipment and non-perishable materials delivered and stored at the site but not incorporated in the work, under the following conditions:

- .1 Items to be protected from fire, theft, vandalism, weather and other damage.
- .2 Storage procedures and areas to be approved.
- .3 Items to be available at all times for inspection by the Owner and Architect.

9.3.4 Contractor shall furnish with Application for Payment an invoice establishing value of material and equipment stored at the site along with a statement of amount to be paid the vendor.

- .1 Such stored items are subject to inspection by Architect before payment is recommended.
- .2 Contractor shall furnish Owner with Certificate of Insurance in accordance with Contract Documents for the full value of the items stored at the site.

9.6.2.1 Contractor shall furnish Architect with satisfactory evidence of payment to vendors supplying material and equipment for approved storage. This shall be done within thirty (30) days after the date of progress payment. Satisfactory evidence of payment shall be one (1) of the following:

- .1 Contractor's canceled check in correct amount with identification of invoices paid.
- .2 A letter or telegram from vendor with authorized signature stating amounts and invoices paid.
- .3 A receipted invoice.

9.6.7.1 Payment for material and equipment delivered and stored shall not relieve Contractor of responsibility for furnishing equipment and material required for the work in the same manner as if such payment were not made.

9.10.6 A prerequisite to final payment shall be that the Contractor furnish proof that he has completed all specification requirements covering the following item as applicable:

Warranties.

ARTICLE 10 Add the following:

- 10.3.4.1 The Contractor shall not bring hazardous materials onto the site nor use in the Work without compliance with the following conditions.
- .2 The Contractor shall be solely responsible for the handling, storage, and use of explosive or other hazardous materials when their use is permitted. For such use, the Contractor shall obtain necessary permits from regulating agencies and submit copies of permits to the Architect for review before proceeding with use.
 - .3 Contractor shall obtain insurance for use of hazardous material and furnish certificates of insurance in keeping with Conditions of the Contract.

ARTICLE 11 Make the following changes:

- 11.1.1 **Revise** “authorized to do business in the jurisdiction in which the Project is located” to read “licensed to do business in Connecticut”.
- 11.1.2 **Revise** “authorized to do business in the jurisdiction in which the Project is located” to read “licensed to do business in Connecticut”.
- 11.2.2 **Revise** “prior to commencement of the Work” to read “within ten (10) days of Notice of Award”.

Add the following:

11.6 Miscellaneous Insurance Requirements

- 11.6.1 The Contractor shall not begin work until he has obtained all insurance as required, nor shall any subcontractor be permitted to commence work until he has obtained all insurance as required under the same provisions. Insurance shall be maintained throughout the life of the Contract.
- 11.6.2 It shall be the responsibility of the Contractor to obtain Certificates of Insurance from each subcontractor and to make certain that all coverage is maintained throughout the life of the Contract.
- 11.6.3 The Contractor, before commencing work, shall supply Owner with Certificates of Insurance evidencing compliance with the insurance requirements. Each certificate shall state that the insurance evidenced by such certificate will not be canceled or reduced without thirty (30) days prior written notice to the Owner.
- 11.6.4 Each subcontractor, before commencing work, shall supply Owner with Certificates of Insurance evidencing compliance with the insurance requirements. Each certificate shall state that the insurance evidenced by such certificate will not be canceled or reduced without thirty (30) days prior written notice to the Owner.

11.6.5 The Contractor shall maintain a file of Certificates of Insurance received from each subcontractor and provide Owner with copy of each certificate.

11.6.6 The Contractor shall furnish to the Owner copies of any endorsements subsequently issued amending coverage or limits.

11.6.7 Contractor's Liability Insurance: Concerning the insurance described in Section 11.1, the Contractor shall maintain the following minimum limits:

.1 Workers' Compensation

- | | | |
|-----|---|---|
| (a) | State | Statutory |
| (b) | Applicable Federal (e.g., Longshoremen, harbor work, work at or outside U.S. Boundaries): | Statutory |
| (c) | Maritime | \$ --- |
| (d) | Employer's Liability | \$1,000,000 Accident
\$1,000,000 Disease
\$1,000,000 Policy Limit |
| (e) | Benefits Required by Union Labor Contracts: | As applicable |

.2 Comprehensive General Liability (Including Premises-Operations; Independent Contractor's Protective; Products and Completed Operations; Broad Form Property Damage):

- (a) Bodily Injury:
- \$1,000,000 Each Occurrence
\$2,000,000 Aggregate, Products and Completed Operations
- (b) Property Damage:
- \$1,000,000 Each Occurrence
\$2,000,000 Aggregate
- (c) Products and Completed Operations Insurance shall be maintained for a minimum of two (2) years after final payment and Contractor shall continue to provide evidence of such coverage to Owner on an annual basis during the aforementioned period.
- (d) Property Damage Liability Insurance shall include coverage for the following hazards:
- X Explosion C Collapse U Underground
- (e) Contractual Liability (Hold Harmless Coverage):
- (1) Bodily Injury:
- \$1,000,000 Each Occurrence
- (2) Property Damage:

SUPPLEMENTARY GENERAL CONDITIONS

\$1,000,000 Each Occurrence
\$5,000,000 Aggregate

(f) Personal Injury, with Employment Exclusion deleted:

\$1,000,000 Aggregate

(g) Name as Additional Insureds: Town of _____ and Silver/Petrucci + Associates, Inc.

.3 Automobile Liability (owned, co-owned, hired):

(a) Bodily Injury:

\$1,000,000 Combined Single Limit Liability

(b) Property Damage:

\$1,000,000 Combined Single Limit Liability

.4 Excess Umbrella Coverage

(a) \$5,000,000 Over the General Liability, Employer's Liability and Commercial Auto Liability policies.

11.6.8 Owner's Liability Insurance: Concerning the insurance described in Section 11.2:

_____ No modification required.

_____ The Contractor shall provide this insurance (normally under an Owner's Protective Liability Policy) with the following limits:

(1) Bodily Injury:

\$1,000,000 Each Occurrence
\$5,000,000 Aggregate

(2) Property Damage:

\$1,000,000 Each Occurrence
\$5,000,000 Aggregate

(3) Personal Injury, with Employment Exclusion deleted

11.6.9 Property Insurance: Concerning the insurance as described in Section 11.2:

_____ No modification required: Owner will purchase (coverage will be included for all materials and equipment furnished by the Owner which is to be incorporated or used in the project when stored off site or when in transit.).

 X Contractor shall purchase the following:

SUPPLEMENTARY GENERAL CONDITIONS

- (1) All Risk
 X Other: Installation Floater.
- (2) On the following form: (select one)
 Completed Value
 Reporting
- (3) X In the Names of the Owner, Contractor, Subcontractor,
and subcontractor as their interests may appear with
limits as follows: (Select One)
- Full insurable value of the Work
 X Amount equal to the Contract sum for the Work

ARTICLE 15 **Make the following changes:**

15.3.2 **Revise to read as follows:** In addition to and prior to arbitration, the parties shall endeavor to settle disputes by mediation in accordance with the Construction Industry Mediation Rules of the American Arbitration Association currently in effect unless the parties mutually agree otherwise. Demand for mediation shall be filed in writing with the other party to this Agreement and with the American Arbitration Association. A demand for mediation shall be made within a reasonable time after the claim, dispute or other matter in question has arisen. In no event shall the demand for mediation be made after the date when institution of legal or equitable proceedings based on such claim, dispute or other matter in question would be barred by the applicable statute of limitations. The provisions of Article 15 notwithstanding, the Contractor expressly agrees to joinder in mediation proceedings between Owner/Architect upon specific written request of the Owner. This agreement shall be valid with the Architect's acceptance of an equal provision in their respective contracts.

END OF SECTION

Application and Certificate for Payment

TO OWNER: PROJECT: GENERIC

FROM CONTRACTOR: VIA ARCHITECT:

APPLICATION NO: 003
 PERIOD TO: _____
 CONTRACT FOR: General Construction
 CONTRACT DATE: _____ / _____ / _____
 PROJECT NOS: _____ / _____ / _____

Distribution to:
 OWNER:
 ARCHITECT:
 CONTRACTOR:
 FIELD:
 OTHER:

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract. Continuation Sheet, AIA Document G703, is attached.

1. ORIGINAL CONTRACT SUM \$0.00
2. NET CHANGE BY CHANGE ORDERS \$0.00
3. CONTRACT SUM TO DATE (Line 1 ± 2) \$0.00
4. TOTAL COMPLETED & STORED TO DATE (Column G on G703) \$0.00
5. RETAINAGE:
 - a. 0 % of Completed Work (Column D + E on G703) \$0.00
 - b. 0 % of Stored Material (Column F on G703) \$0.00
- Total Retainage (Lines 5a + 5b or Total in Column I of G703) \$0.00
6. TOTAL EARNED LESS RETAINAGE \$0.00
 (Line 4 Less Line 5 Total)
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT \$0.00
 (Line 6 from prior Certificate)
8. CURRENT PAYMENT DUE \$0.00
9. BALANCE TO FINISH, INCLUDING RETAINAGE (Line 3 less Line 6) \$0.00

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner	\$0.00	\$0.00
Total approved this Month	\$0.00	\$0.00
TOTALS	\$0.00	\$0.00
NET CHANGES by Change Order		\$0.00

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR: _____ Date: _____
 By: _____
 State of: _____
 County of: _____
 Subscribed and sworn to before me this _____ day of _____
 Notary Public: _____
 My Commission expires: _____

ARCHITECT'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising this application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED \$0.00
 (Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation Sheet that are changed to conform with the amount certified.)

ARCHITECT: _____ Date: _____
 By: _____

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

ANSONIA PUBLIC SCHOOL MAINTENANCE STORAGE GARAGE

MAINTENANCE STORAGE GARAGE

20 PULASKI HIGHWAY

ANSONIA, CONNECTICUT 06401

<u>Drawing Number</u>	<u>Drawing Name</u>
1	EXIST. CONDITIONS & DEMOLITION PLAN
2	SITE PLAN
3	GRADING, UTILITIES & EROSION CONTROL PLAN
A100	Floor Plan and Elevations
M100	Mechanical Floor Plan

END OF DRAWING LIST

1 PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General Conditions and other Division-1 Specification Sections, apply to this Section.

1.2 PROJECT DESCRIPTION

- A. The Project is being developed on a design/build basis, with materials generally specified in the performance specifications contained herein. The project generally includes, but is not necessarily limited to the following major elements:
 - 1. Site clearing and grubbing, site survey and layouts, excavation and related site work, primary utility installations, erosion controls and anti-track pads.
 - 3. Construction of service driveways, including gravel base, bituminous concrete paving, curbs, striping and other signage. Construction of new grass areas.
 - 3. Construction of a 1 story maintenance building, including concrete, pre-engineered building, miscellaneous metals, carpentry, roofing and moisture/thermal protection systems, gutters and downspouts, doors and windows, exterior signage, mechanical, gas plumbing and electrical systems and equipment.
 - 4. Off site disposal of all removed materials.
 - 5. Provide cutting/boring and patching/firesafing for any new mechanical penetrations up to 6" in diameter.
 - 6. Provide architectural and engineering design services necessary to design the facility in accordance with the contract documents and in order to obtain a building permit (and all related development permits).
 - 7. Environmental contamination abatement or removal is not included in the scope of the work and is the Owner's responsibility. Promptly notify the Owner of any suspected contamination sources on discovery and follow State of Connecticut DEEP containment procedures immediately.

1.4 CONTRACTOR USE OF PREMISES

- A. General: Limit use of the premises to construction activities in areas indicated; allow for Owner occupancy and use by the public.
- B. Locate contractor's trailers and storage yards in area designated by the Owner.
- C. The Contractor will be required to provide and maintain portable toilets for use by the Contractor's personnel.
- D. The Contractor may chose to provide his own field office or trailer, in which will all construction documents will be maintained in current and readable form. The trailer may contain a meeting room large enough to conduct job progress meetings, sub-contractor meetings and other coordination meetings.
- E. The Contractor must pay for and provide power service to the trailer and construction site. In like manner, the Contractor must pay for any telephone service to the site, either via land lines or cellular service. However, a fax machine at the site is required and may require extraordinary service for that equipment.

1.5 OWNER OCCUPANCY

- A. Full Owner Occupancy: Cooperate with the Owner during construction operations to minimize conflicts and facilitate Owner usage of the rest of the driveway access to the high school or its parking lots. Phase the construction as necessary to minimize the disruption to the Owner's operations. Due to the public's access and the Owner's operations on the site, no interference of school operations and business is permitted once the project, or a portion of the project, is declared substantially complete and turned over to the Owner. Perform the Work in the remaining areas so as not to interfere with the Owner's operations unless coordinated in advance with the Owner's consent, providing clear drives on all sides of the site for the Owner's 24 hour access to the property.

2 PART 2 - PRODUCTS

Not Used.

3 PART 3 - EXECUTION

Not Used.

END OF SECTION

1 PART 1 – GENERAL

1.1 SECTION INCLUDES

- A. Schedule of Values
- B. Application for Payment
- C. Change procedures
- D. Measurement and Payment – Unit Prices
- E. Alternates
- F. Quantity Allowances

1.2 RELATED SECTIONS

- A. Section 01300 – Submittals: Schedule of Values
- B. Section 01600 – Material and Equipment: Product substitutions and alternates

1.3 SCHEDULE OF VALUES

- A. Submit typed schedule on AIA Form G703 – Application and Certificate for Payment Continuation Sheet.
- B. Submit Schedule of Values in duplicate within 15 days after date of Owner-Contractor Agreement established in Notice to Proceed.
- C. Format: Utilize the Table of Contents of this Project Manual. Identify each line item with number and title of the major specification Section. Identify site mobilization, bonds and insurance.
- D. Include within each line item, a direct proportional amount of Contractor's overhead and profit.
- E. Revise schedule to list approved Change Orders, with each Application for Payment.

1.4 APPLICATIONS FOR PAYMENT

- A. Submit three copies of each application on AIA Form G702 – Project Application and Certificate for Payment.
 - 1. Content and Format: Utilize Schedule of Values for listing items in Application for Payment.
- B. Provide insurance certificates and verification of material in storage included in the application for payment.
- C. Include all forms required by Owner.

1.5 CHANGE PROCEDURES

- A. The Architect will advise of minor changes in the Work not involving an adjustment to Contract Sum/Price or Contract Time as authorized by AIA A201, 1997 Edition, Article 7.4 by issuing supplemental instructions on AIA Form G710.
- B. The Architect may issue a Proposal Request or Notice of Change which includes a detailed description of a proposed change with supplementary or revised Drawings and specifications, a change in Contract Time for executing the change with a stipulation of any overtime work required and the period of time during which the requested price will be considered valid. Contractor will prepare and submit an estimate within 7 calendar days.
- C. The Contractor may propose changes by submitting a request for change to the Architect, describing the proposed change and its full effect on the Work. Include a statement describing the reason for the change, and the effect on the Contract Sum/Price and Contract Time with full documentation and a statement describing the effect on Work by separate or other contractors. Document any requested substitutions in accordance with Section 01600.
- D. Stipulated Sum/Price Change Order: Based on Proposal Request and Contractor's fixed or maximum price quotation or Contractor's request for a Change Order as approved by Architect.
- E. Unit Price Change Order: For pre-determined unit prices and quantities, the Change Order will be executed on a fixed unit price basis. For unit costs or quantities of units of work which are not pre-determined, execute Work under a Construction Change Authorization. Changes in Contract Sum/Price or Contract Time will be computed as specified for Time and Material Change Order.
- F. Construction Change Authorization: Architect may issue a directive, on AIA Form G714 Construction Change Directive signed by the Owner, instructing the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order. Document will describe changes in the Work, and designate method of determining any change in Contract Sum/Price or Contract Time. Promptly execute the change.
- G. Time and Material Change Order: Submit itemized account and supporting data after completion of change, within time limits indicated in the Conditions of the Contract. Architect will determine the change allowable in Contract Sum/Price and Contract Time as provided in the Contract Documents.
- H. Maintain detailed records of work done on Time and Material basis. Provide full information required for evaluation of proposed changes, and to substantiate costs

for changes in the Work.

- I. Change Order Forms: AIA G701 Change Order.
- J. Execution of Change Orders: Architect will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.

1.6 MEASUREMENT AND PAYMENT – UNIT PRICES

- A. Authority: Measurement methods are delineated in the individual specification sections.
- B. Take all measurements and compute quantities. The Architect will verify measurements and quantities.
- C. Payment Includes: Full compensation for all required labor, products, tools, equipment, plant, transportation, services and incidentals; erection, application or installation of an item of the Work; overhead and profit.
- D. Unit prices that are associated with work that is omitted from the Contract, shall credit to the Owner the Unit Price value less 10 percent.

1.7 ALTERNATES

- A. Voluntary alternates quoted on Bid Forms will be reviewed and accepted or rejected at the Owner's option. Accepted Alternates will be identified in Owner-Contractor Agreement.
- B. Coordinate related work and modify work as required.

1.8 ALLOWANCES

- C. Costs Included in Allowances: Cost of Product to Contractor or Subcontractor, less applicable trade discounts; delivery to site and applicable taxes.
- D. Architect Responsibilities:
 - 1. Consult with Contractor in consideration and selection of Products, suppliers and installers.
 - 2. Select Products in consultation with Owner and transmit decision to Contractor.
 - 3. Prepare Change Order.
- E. Contractor Responsibilities:
 - 1. Assist Architect in determination of scope of work, selection of Products,

- suppliers and installers.
 - 2. Obtain proposals from suppliers and installers and offer recommendations.
 - 3. On notification of selection by Architect execute purchase agreement with designated supplier and installer.
 - 4. Arrange for and process shop drawings, product data and samples. Arrange for delivery.
 - 5. Promptly inspect Products upon delivery for completeness, damage and defects. Submit claims for transportation damage.
- F. Funds will be drawn from Allowances only by Change Order.
- E. Allowances listed are to be included in the base bid proposal, for the "**Base Bid**" as listed on the Bid Form. Their values will be tracked during the course of the project, with deletions from the contract price by change order should the listed quantities not be removed nor installed; or added to the contract price by change order should quantities exceeding those referenced in the Allowances be required by field conditions.
- 1. **Allowance No. 1 – Design and Construction Allowance:** An allowance that the Owner shall manage and use for design or construction contingencies during the course of the design or construction for the project. This allowance will be utilized at the direction and discretion of the Owner, Architect or Engineer only.
 - 2. Allowances that are unused or omitted from the Contract shall be credited to the Owner at the Unit Price value less 5 percent.”

2 PART 2 – PRODUCTS

Not Used

3 PART 3 – EXECUTION

Not Used

END OF SECTION

1 PART 1 – GENERAL

1.1 SUMMARY

- A. This Section specifies administrative and procedural requirements for Alternates.
 - 1. Definition: An Alternate is an amount proposed by Proposers and stated on the Proposal Form for certain construction activities defined in the Proposers Requirements that may be added to or deducted from Base Proposal amount if the Owner decides to accept a corresponding change in either the amount of construction to be completed, or in the products, materials, equipment, systems or installation methods described in Contract Documents.
- B. Coordination: Coordinate related Work and modify or adjust adjacent Work as necessary to ensure that Work affected by each accepted Alternate is complete and fully integrated into the project.
- C. Notification: Immediately following the award of the Contract, prepare and distribute to each party involved, notification of the status of each Alternate. Indicate whether Alternates have been accepted, rejected or deferred for consideration at a later date. Include a complete description of negotiated modifications to Alternates.

1.2 SCHEDULE

- A. A "Schedule of Alternates" is included at the end of this Section. Specification Sections referenced in the Schedule contain requirements for materials and methods necessary to achieve the Work described under each Alternate.
- B. Include as part of each Alternate, miscellaneous devices, accessory objects, construction methods, similar items and labor incidental to or required for a complete installation whether or not mentioned as part of the Alternate.

2 PART 2 – PRODUCTS

Not Used

3 PART 3 – EXECUTION

3.1 BASE PROPOSAL

- A. The Base Proposal includes all of the work indicated in the construction documents with the exception of the work indicated in **Voluntary Alternate A.**

3.2 SCHEDULE OF ALTERNATES

- A. **DEDUCT ALTERNATE NO. A: Delete 12 Windows:** Delete from the Base Proposal the labor, materials and equipment related to the provision and installation of the 12 wall windows and related supporting wall structure elements indicated in the exterior walls of the building. The deletion includes the provision of metal siding and insulation installed in lieu of the windows

- B. **Voluntary Alternate B:** Voluntary alternate, prepared at the contractor's discretion, when an appreciable value is represented in the Owner's best interest, either "ADD" or "DEDUCT". Include complete information in a separate narrative or proposal on the alternate, including manufacturer's literature, schedule information, etc.

END OF SECTION

1 PART 1 – GENERAL

1.1 SECTION INCLUDES

- A. Requirements and limitations for cutting and patching of Work

1.2 RELATED SECTIONS

- A. Section 01010 – Summary of Work: Work by Owner or by separate contractors
- B. Section 01300 – Submittals
- C. Section 01600 – Materials and Equipment: Product Options and Substitutions
- D. Individual Product Specification Sections:
 - 1. Cutting and patching incidental to work of the Section.
 - 2. Advance notification to other Sections of openings required in work of those Sections.
 - 3. Limitations on cutting mechanical or electrical systems.

1.3 SUBMITTALS

- A. Submit written request in advance of cutting or alteration which affects:
 - 1. Structural integrity of any element of Project.
 - 2. Integrity of weather-exposed or moisture-resistant element.
 - 3. Efficiency, maintenance or safety of any operational element.
 - 4. Visual qualities of sight exposed elements.
 - 5. Work of Owner or separate contractor.
- B. Include in request:
 - 1. Location and description of affected work.
 - 2. Necessity for cutting or alteration.
 - 3. Description of proposed work and products to be used.
 - 4. Alternatives to cutting and patching.
 - 5. Effect on work of Owner or separate contractor.
 - 6. Written permission of affected separate contractor.
 - 7. Date and time work will be executed.

2 PART 2 – PRODUCTS

2.1 MATERIALS

- A. Primary Products: Those required for original installation.
- B. Product Substitution: For any proposed change in materials, submit request for substitution under provisions of Section 01600.

3 PART 3 – EXECUTION

3.1 EXAMINATION

- A. Inspect existing conditions prior to commencing Work, including elements subject to damage or movement during cutting and patching.
- B. After uncovering existing work, inspect conditions affecting performance of work.
- C. Beginning of cutting or patching means acceptance of existing conditions.

3.2 PREPARATION

- A. Provide temporary supports to ensure structural integrity of the Work. Provide devices and methods to protect other portions of Project from damage.
- B. Provide protection from elements for areas which may be exposed by uncovering work.
- C. Maintain excavations free of water.

3.3 CUTTING AND PATCHING

- A. Execute cutting, fitting and patching including excavation and fill to complete work.
- B. Fit products together to integrate with other work.
- C. Uncover work to install ill-timed work.
- D. Remove and replace defective or non-conforming work.
- E. Remove samples of installed work for testing when requested.
- F. Provide openings in the work for penetration of mechanical and electrical work.

3.4 PERFORMANCE

- A. Execute work by methods to avoid damage to other Work, and which will provide appropriate surfaces to receive patching and finishing.
- B. Employ original installer to perform cutting and patching for weather exposed and moisture resistant elements, and sight-exposed surfaces.

- C. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
- D. Restore work with new products in accordance with requirements of Contract Documents.
- E. Fit work air tight to pipes, sleeves, ducts, conduit and other penetrations through surfaces.
- F. Refinish surfaces to match adjacent finish. For continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.

END OF SECTION

1 PART 1 – GENERAL

1.1 SECTION INCLUDES

- A. Submittal procedures
- B. Construction progress schedules
- C. Proposed products list
- D. Shop drawings
- E. Product data
- F. Samples
- G. Manufacturers' instructions
- H. Manufacturers' certificates

1.2 RELATED SECTIONS

- A. Section 01010 – Schedule of Values
- B. Section 01700 – Contract Closeout: Contract warranty and manufacturer's certificates and related closeout submittals

1.3 SUBMITTAL PROCEDURES

- A. Transmit each submittal with Architect/Engineer accepted form.
- B. Sequentially number the transmittal forms. Re-submittals to have original number with an alphabetic suffix.
- C. Identify Project, Contractor, Subcontractor or supplier; pertinent Drawing sheet and detail number(s), and specification Section number, as appropriate.
- D. Apply Contractor's stamp, signed or initialed certifying that review, verification of Products required, field dimensions, adjacent construction Work and coordination of information, is in accordance with the requirements of the Work and Contract Documents.
- E. Schedule submittals to expedite the Project, and deliver to Architect/Engineer at business address. Coordinate submission of related items.
- F. Identify variations from Contract Documents and Product or system limitations which may be detrimental to successful performance of the completed Work.
- G. Provide space for Contractor and Architect/Engineer review stamps.
- H. Revise and resubmit submittals as required, identify all changes made since previous submittal.

- I. Distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with provisions.

1.4 CONSTRUCTION PROGRESS SCHEDULES

- A. Submit initial progress schedule in duplicate within 15 days after date established in Notice to Proceed for Architect/Engineer review.
- B. Revise and resubmit as required.
- C. Submit revised schedules with each Application for Payment, identifying changes since previous version.
- D. Submit a horizontal bar chart with separate line for each major section of Work or operation identifying first work day of each week.
- E. Show complete sequence of construction by activity, identifying Work of separate stages and other logically grouped activities. Indicate the early and late start, early and late finish, float dates and duration.
- F. Indicate estimated percentage of completion for each item of Work at each submission.
- G. Indicate submittal dates required for shop drawings, product data, samples and product delivery dates, including those furnished by Owner and under Allowances.

1.5 PROPOSED PRODUCTS LIST

- A. Within 15 days after date of Notice to Proceed, submit complete list of major products proposed for use, with name of manufacturer, trade name and model number of each product.
- B. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation and reference standards.

1.6 SHOP DRAWINGS

- A. Submit in the form of one reproducible transparency and two opaque reproductions.
- B. After review, reproduce and distribute in accordance with Article on Procedures above and for Record Documents described in Section 01700 – Contract Closeout.

1.7 PRODUCT DATA

- A. Submit the number of copies which the Contractor requires, plus two copies which will be retained by the Architect/Engineer.
- B. Mark each copy to identify applicable products, models, options and other data. Supplement manufacturers' standard data to provide information unique to this Project.
- C. After review, distribute in accordance with Article on Procedures above and provide copies for Record Documents described in Section 01700 – Contract Closeout.

1.8 SAMPLES

- A. Submit samples to illustrate functional and aesthetic characteristics of the Product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
- B. Submit samples of finishes from the full range of manufacturers' standard colors for Architect/Engineer's selection.
- C. Include identification on each sample, with full Project information.
- D. Submit the number or samples specified in individual specification Sections; one of which will be retained by Architect/Engineer.
- E. Reviewed samples which may be used in the Work are indicated in individual specification Sections.

1.9 MANUFACTURER'S INSTRUCTIONS

- A. When specified in individual specification Sections, submit manufacturers' printed instructions for delivery, storage, assembly, installation and finishing, in quantities specified for Product Data.
- B. Identify conflicts between manufacturers' instructions and Contract Documents.

1.10 MANUFACTURER'S CERTIFICATES

- A. When specified in individual specification Sections, submit manufacturers' certificate to Architect/Engineer for review, in quantities specified for Product Data.
- B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference date, affidavits and certifications as appropriate.

- C. Certificates may be recent or previous test results on material or Product, but must be acceptable to Architect/Engineer.

2 PART 2 – PRODUCTS

Not Used

3 PART 3 – EXECUTION

Not Used

END OF SECTION

1 PART 1 – GENERAL

1.1 SECTION INCLUDES

- A. Quality assurance and control of installation
- B. References
- C. Field samples
- D. Mock-up
- E. Inspection and testing laboratory services
- F. Manufacturers' field services and reports

1.2 RELATED SECTIONS

- A. Section 01300 – Submittals: Submission of Manufacturers' Instructions and Certificates
- B. Section 01600 – Material and Equipment: Requirements for material and product quality

1.3 QUALITY ASSURANCE/CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions and workmanship, to produce Work of specified quality.
- B. Comply fully with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.
- D. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes or specified requirements indicate higher standards or more precise workmanship.
- E. Perform work by persons qualified 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.

1.4 REFERENCES

- A. Conform to reference standard by date of issue current on date of Contract Documents.
- B. Obtain copies of standards when required by Contract Documents.

- C. Should specified reference standards conflict with Contract Documents, request clarification for Architect before proceeding.
- D. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.5 FIELD SAMPLES

- A. Install field samples at the site as required by individual specifications Sections for review.
- B. Acceptable samples represent a quality level for the Work.
- C. Where field sample is specified in individual Sections to be removed, clear area after field sample has been accepted by Architect.

1.6 MOCK-UP

- A. Assemble and erect specified items, with specified attachment and anchorage devices, flashings, seals and finishes.
- B. Where mock-up is specified in individual Sections to be removed, clear area after mock-up has been accepted by Architect.

1.7 INSPECTION AND TESTING LABORATORY SERVICES

- A. Owner will appoint, employ and pay for services of an independent firm to perform inspection and testing.
- B. The independent firm will perform inspections, tests and other services specified in individual specification Sections and as required by the Architect.
- C. Reports will be submitted by the independent firm to the Architect, Owner, affected Engineers and the Contractor, indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents.
- D. Cooperate with independent firm; furnish samples of materials, design mix, equipment, tools, storage and assistance as requested.
 - 1. Notify independent testing firm 24 hours prior to expected time for operations requiring services.
 - 2. Make arrangements with independent firm and pay for additional samples and tests required for Contractor's use.

- E. Retesting required because of non-conformance to specified requirements shall be performed by the same independent firm on instructions by the Architect. Payment for retesting will be charged to the Contractor by deducting inspection or testing charges from the Contract Sum/Price.

1.8 MANUFACTURERS' FIELD SERVICES AND REPORTS

- A. When specified in individual specification Sections, require material or Product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment and test, adjust and balance of equipment as applicable, and to initiate instructions when necessary.
- B. Individuals to report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

2 PART 2 – PRODUCTS

Not Used

3 PART 3 – EXECUTION

Not Used

END OF SECTION

1 PART 1 – GENERAL

1.1 SECTION INCLUDES

- A. Products
- B. Transportation and handling
- C. Storage and protection
- D. Product options
- E. Substitutions

1.2 RELATED SECTIONS

- A. General Conditions – Instructions to Bidders: Product options and substitution procedures

1.3 PRODUCTS

- A. Products: Means new material, components and systems forming the Work. Does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components required for reuse.
- B. Do not use materials and equipment removed from existing premises, except as specifically permitted by the Contract Documents.
- C. Provide interchangeable components of the same manufacturer, for similar components.

1.4 TRANSPORTATION AND HANDLING

- A. Transport and handle products in accordance with manufacturer's instructions.
- B. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.
- C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement or damage.

1.5 STORAGE AND PROTECTION

- A. Store and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight, climate-controlled enclosures.
- B. For exterior storage of fabricated products, place on sloped supports, above ground.

- C. Provide off-site storage and protection when site does not permit on-site storage or protection.
- D. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation.
- E. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement or damage.
- F. Arrange storage of products to permit access for inspection. Periodically inspect to assure products are undamaged and are maintained under specified conditions.
- G. Protect and clean the interior spaces from contamination of the by-products of the roofing operations as specified in Section 01010.

1.6 PRODUCT OPTIONS

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

1.7 SUBSTITUTIONS

- A. Architect will consider requests for Substitutions only within 15 days after date established in Notice to Proceed.
- B. Substitutions may be considered when a product becomes unavailable through no fault of the Contractor.
- C. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- D. A request constitutes a representation that the Contractor:
 - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
 - 2. Will provide the same warranty for the Substitution as for the specified product.
 - 3. Will coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost to Owner.

4. Waives claims for additional costs or time extension which may subsequently become apparent.
 5. Will reimburse Owner for review or redesign services associated with re-approval by authorities.
- E. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.
- F. Substitution Submittal Procedure:
1. Submit three copies of request for Substitution for consideration. Limit each request to one proposed Substitution.
 2. Submit shop drawings, product data and certified test results attesting to the proposed product equivalence.
 3. The Architect will notify Contractor, in writing, of decision to accept or reject request.

2 PART 2 – PRODUCTS

Not Used

3 PART 3 – EXECUTION

Not Used

END OF SECTION

1 PART 1 – GENERAL

1.1 SECTION INCLUDES

- A. Closeout procedures
- B. Final cleaning
- C. Adjusting
- D. Project record documents

1.2 RELATED SECTIONS

- A. General Conditions: Project commissioning
- B. Section 01730 – Operation and Maintenance Data
- C. Section 01740 – Warranties and Bonds

1.3 CLOSEOUT PROCEDURES

- A. Submit written certification that Contract Documents have been reviewed, Work has been inspected and that Work is complete in accordance with Contract Documents and ready for Architect's inspection.
- B. Provide submittals to Architect and Owner that are required by governing or other authorities.
- C. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments and sum remaining due.
- D. Owner will occupy all portions of the building as specified in Section 01010.

1.4 FINAL CLEANING

- A. Execute final cleaning prior to final inspection.
- B. Clean equipment and fixtures to a sanitary condition.
- C. Clean filters of operating equipment contaminated by project operations.
- D. Clean debris from roofs and drainage systems.
- E. Clean site; sweep paved areas, rake clean landscaped surfaces.
- F. Remove waste and surplus materials, rubbish and construction facilities from the site.

1.5 PROJECT RECORD DOCUMENTS

- A. Maintain on site, one set of the following record documents; record actual revisions to the Work:
 - 1. Contract Drawings.
 - 2. Specifications.

3. Addenda.
 4. Change Orders and other Modifications to the Contract.
 5. Reviewed shop drawings, product data and samples.
- B. Store Record Documents separate from documents used for construction.
- C. Record information concurrent with construction progress.
- D. Specifications: Legibly mark and record at each Product section description of actual Products installed, including the following:
1. Manufacturer's name and product model and number.
 2. Product substitutions or alternates utilized.
 3. Changes made by Addenda and Modifications.
- E. Record Documents and Shop Drawings: Legibly mark each item to record actual construction including:
1. Field changes of dimension and detail.
 2. Details not on original Contract Drawings.
- F. Delete Architect title block and seal from all documents.
- G. Submit documents to Architect with claim for final Application for Payment.

2 PART 2 – PRODUCTS

Not Used

3 PART 3 – EXECUTION

Not Used

END OF SECTION

1 PART 1 – GENERAL

1.1 SECTION INCLUDES

- A. Format and content of manuals
- B. Schedule of submittals

1.2 RELATED SECTIONS

- A. Section 01300 – Submittals: Submittals procedures, shop drawings, product data and samples
- B. Section 01700 – Contract Closeout: Contract Closeout Procedures
- C. Individual Specifications Sections: Specific requirements for operation and maintenance data

1.3 QUALITY ASSURANCE

- A. Prepare instructions and data by personnel experienced in maintenance and operation of described products.

1.4 FORMAT

- A. Prepare data in the form of an instructional manual.
- B. Binders: Commercial quality, 8½ x 11 inch three-ring binders with hardback, cleanable, plastic covers; one inch maximum ring size. When multiple binders are used, correlate data into related consistent groupings.
- C. Cover: Identify each binder with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; list title of Project; identify subject matter of contents.
- D. Arrange content by systems under section numbers and sequence of Table of Contents of this Project Manual.
- E. Provide tabbed fly leaf for each separate product and system, with typed description of product and major component parts the systems.
- F. Text: Manufacturer's printed data, or typewritten data on 20-pound paper.
- G. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.

1.5 CONTENTS, EACH VOLUME

- A. Table of Contents: Provide title of Project; names, addresses and telephone numbers of Architect/Engineer, Sub-consultants and Contractor with name of responsible parties; schedule of products and systems, indexed to content of the volume.
- B. For Each Product or System: List names, addresses and telephone numbers of Subcontractors and suppliers, including local source of supplies and replacement parts.
- C. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
- D. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams.
- E. Type Text: As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.
- F. Warranties and Bonds: Bind in copy of each and provide as specified in Section 01740.

1.6 MANUAL FOR MATERIALS AND FINISHES

- A. Building Products, Applied Materials and Finishes: Include product data, with catalog number, size, composition and color and texture designations.
- B. 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.
- C. 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.
- D. Additional Requirements: As specified in individual product specification Sections.
- E. Provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.

1.7 MANUAL FOR EQUIPMENT AND SYSTEMS

- A. Each Item of Each System: Include description of unit or system and component parts. Identify function, normal operating characteristics and limiting conditions.
- B. Maintenance Requirements: Include routine procedures and guide for trouble-shooting; repair and alignment, adjusting and checking instructions.
- C. Include manufacturer's printed operation and maintenance instructions.
- D. Provide list of original manufacturer's spare parts, or roofing components, current prices and recommended quantities to be maintained in storage.
- E. Additional Requirements: As specified in individual product specification Sections.
- F. Provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.

1.8 SUBMITTALS

- A. Submit two copies of preliminary draft or proposed formats and outlines of contents before start of Work. Architect/Engineer will review draft and return one copy with comments.
- B. Submit one copy of completed volumes in final form 15 days prior to final inspection. Copy will be returned after final inspection, with Architect/Engineer comments. Revise content of documents as required prior to final submittal.
- C. Submit three copies of revised volumes of data in final form within ten days after final inspection.

1.9 SCHEDULE OF SUBMITTALS

- A. As a minimum, the following systems, or subsystems within each of the listed sections, shall be submitted in the manual. Other equipment, systems or materials not listed, but installed shall be included in the manual.
 - Steel Doors
 - Sectional Overhead Doors
 - Windows
 - Door Hardware
 - Painting
 - Signs
 - Pre Engineered Building Components
 - Plumbing and HVAC Systems

- Electrical Systems

2 PART 2 – PRODUCTS

Not Used

3 PART 3 – EXECUTION

Not Used

END OF SECTION

1 PART 1 – GENERAL

1.1 SECTION INCLUDES

- A. Preparation and submittal
- B. Time and schedule of submittals

1.2 RELATED SECTIONS

- A. Section 01730 – Operations and Maintenance Data
- B. Individual Specifications Sections: Warranties required for specific products or Work

1.3 FORM OF SUBMITTALS

- A. Bind in commercial quality, 8½ x 11-inch binders with hardback, cleanable, plastic covers.
- B. Label cover of each binder with typed or printed title WARRANTIES AND BONDS, with title of Project; name, address and telephone number of Contractor and name of responsible principal.
- C. Table of Contents: Neatly typed, in the sequence of the Table of Contents of the Project Manual, with each item identified with the number and title of the specification Section in which specified, and the name of the product or work item.
- D. Separate each warranty or bond with index tab sheets keyed to the Table of Contents listing. Provide full information, using separate typed sheets as necessary. List Subcontractor, supplier and manufacturer, with name, address and telephone number of responsible principal.

1.4 PREPARATION OF SUBMITTALS

- A. Obtain warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers and manufacturers, within ten days after completion of the applicable item or work. Except for items put into use with Owner's permission, leave date of beginning of time of warranty until the Date of Substantial Completion is determined.
- B. Verify that documents are in proper form, contain full information and are notarized.
- C. Co-execute submittals when required.
- D. Retain warranties and bonds until time specified for submittal.

1.5 TIME OF SUBMITTALS

- A. Make other submittals within ten days after Date of Substantial Completion, prior to final Application for Payment.
- B. For items of Work when acceptance is delayed beyond Date of Substantial Completion, submit within ten days after acceptance, listing the date of acceptance as the beginning of the warranty period.

1.6 SCHEDULE OF SUBMITTALS

- A. As a minimum, standard manufacturer's warranties for the following systems, or subsystems within each of the listed sections, including standard finish warranties, shall be submitted. Other warranties for equipment, systems or materials not listed, but installed shall be included in the manual.

- Steel Doors
- Sectional Overhead Doors
- Windows
- Door Hardware
- Pre Engineered Building Components
- Plumbing and HVAC Systems
- Electrical Systems

2 PART 2 – PRODUCTS

Not Used

3 PART 3 – EXECUTION

Not Used

END OF SECTION

SECTION 02060
SITE DEMOLITION AND SITE CLEARING

1 PART 1 - GENERAL

1.1 WORK INCLUDES

- A. Saw-cut and remove or reclaim existing bituminous concrete pavement and curbing.
- B. Clearing and grubbing of trees and stumps within the work area.
- C. Remove existing chain link fence and gate.

1.2 CONDITIONS & REQUIREMENTS

- A. Refer to Division 1 Specifications for general conditions and requirements.

1.3 REGULATORY REQUIREMENTS:

- A. Conform to applicable codes for disposal of debris.

2 PART 2 - PRODUCTS

(Not Applicable)

3 PART 3 - EXECUTION

3.1 PROTECTION:

- A. Protect plant growth and features remaining as final landscaping. All existing vegetation (trees, shrubs, grasses, etc.) to remain shall be protected from injury. Individual trees and shrubs to be saved within the designated work area shall be adequately protected by Contractor as part of this Contract as shown on detail drawings or using (4) 2"x4"x8" posts at least 6 feet from center of tree with snow fencing securely fastened to posts. Protect groups of vegetation by snow fencing similarly attached to 2"x4" posts at minimum 6' on-center. Remove all protective barriers as directed by Owner.
- B. Existing vegetation not adequately protected and damaged during construction shall be replaced with plants equal to or better than existing by the Contractor at no additional cost to the Owner. Contractor shall carefully prune branches in the way of construction. Only approved methods and tools will be permitted. Use of axes for trimming or spurs for climbing will not be permitted. Immediately paint all scars and cuts (2 inch diameter or larger) with approved tree compound or pruning paint.
- C. Protect bench marks and existing work from damage or displacement.

3.2 SITE CLEARING

- A. Clear areas required for access to site and execution of work.
- B. Clear and grub designated areas of all stumps, roots and other objectionable material which shall be disposed of by removal from the site. Stumps including root system shall be removed to minimum 6" below finish grade, unless otherwise noted on drawings.
- C. Remove all debris from site.

3.3 SAW CUTTING

- A. Cut pavement to the full depth of the course or courses. In removing existing pavement, top course and/or base course, or combination thereof, the sections to be removed shall be cut to the neat lines shown on the plans or as directed by the Owner's Representative. Portions of remaining pavements injured or destroyed by the Contractor's work shall be replaced by the Contractor without additional compensation. Saw cuts shall be neat and straight to the approval of the Owner. Additional saw cuts, to the approval of the Owner's Representative, shall be made at no additional cost when the initial cuts are unacceptable.

3.4 PAVEMENT REMOVAL:

- A. Scarify with the proper equipment bituminous concrete, oil penetration and/or portland cement concrete pavements in varying depth. Where a remainder of the pavement is to remain, a clean saw cut to the full depth of pavement shall be made to separate the pavement from that being removed.
- B. All utilities, gate hoses, catch basins, manholes, frames, covers and other miscellaneous item scheduled to remain or as directed by the Owner's Representative shall be protected from damage and shall be reset, repaired or replaced to grade as required by the Owner's Representative.
- C. Immediately dispose of all waste material to an off-site location.
- D. Remove to full depth all pavement scheduled for removal. A maximum of three (3) inches below the pavement shall be removed during this work when new paving shall be placed. Base material removed to a depth lower than three (3) inches shall be replaced, spread and compacted to the satisfaction of the Owner's Representative. Such work shall be at the Contractor's expense; no additional payment for this work will be made. Areas where no paving shall be placed, entire base shall be removed.

3.5 UNCLASSIFIED EXCAVATION:

- A. Excavate all unsuitable materials such as defective gravel bases, concrete retaining walls, light pole foundations, head walls, blocks, curbing, conduits, pavements, and other waste materials or debris that is not scheduled for removal under other sections of this specification.

- B. Dispose of all unsuitable materials at an off-site location immediately after removal.

3.6 CHAIN LINK FENCING

- A. Remove existing chain link fence and gate as indicated on the Demolition plan.
- B. Remove all surplus materials from site and legally dispose.

3.7 DUST CONTROL:

- A. Provide all equipment, labor, materials and related work necessary for the prevention and control of dust resulting from operations in the performance of the work of this contract and in accordance with additional requirements specified herein. All costs in connection therewith shall be considered to be included in the various items as listed in the bid.
- B. When, in the opinion of the Owner's Representative, conditions at the site are such as to require dust control measures to supplement those required to be provided by the Contractor as described in the preceding paragraph, the Owner's Representative may direct the Contractor to furnish and spread calcium chloride over certain areas at the site, at certain times and at specific rates of application. The calcium chloride shall be spread over the designated areas by approved mechanical devices at the rate for each areas as directed at no additional costs to the Owner.

END OF SECTION

SECTION 02200
EARTHWORK

1 PART 1 - GENERAL

1.1 WORK INCLUDES

- A. Excavation and disposal of unsuitable or excess materials.
- B. Excavation, fill, backfill and refill, as indicated or required, including compaction.
- C. Rock removal, as required.
- D. Rough grading, including compaction of existing materials and granular fills, backfills, and refills.
- E. Trench excavation, bedding and backfill for all utilities, as directed, including compaction.
- F. Riprap and riprap bedding.
- G. Dewatering and control of water, as required, for all construction operations.
- H. Protection of existing buildings, pavements and utilities to remain.
- J. Sheet piling, shoring and bracing of structural and trench excavations.

1.2 PROTECTION

- A. Excavation Support: The work is to some extent located in an area near existing construction and new work. Operations will be conducted so as to provide adequate support at all times for these facilities. All excavation shall be sheeted, shored and braced. Excavation shall be sloped, if necessary, to prevent cave-ins, or undermining of these facilities. Sheet piling, shoring and bracing shall be removed before backfilling is complete.
- B. Dewater when excavations are to some extent below existing groundwater levels and the site is subject to surface water and groundwater flow during the course of construction.
 - 1. Control and pitch the grading to prevent water from running into the excavated areas or to prevent damage to other structures or work already accomplished.
 - 2. The Contractor shall furnish all pumping and other dewatering equipment necessary to keep excavated area dry during construction. The groundwater shall be pumped adequately so that the water table is maintained a minimum of two (2) feet below the bottom of the excavation at all times. Filters shall be used on the dewatering devices to prevent

the removal of fines from the soil. Water shall not be conducted onto adjacent property except in existing water courses.

3. Operations and Performance: Operate the dewatering system continuously, 24 hours per day, 7 days per week, until such time as construction work below existing water levels is complete, unless directed otherwise. Measure and record the performance of the dewatering system at the same time each day by use of suitable observation wells or piezometers installed in conjunction with the dewatering system. After placement of initial slabs and backfill, the water level may be allowed to rise, but at no time allow it to be higher than one foot below the prevailing level of excavation or backfill.

1.4 ENGINEERING AND SURVEY WORK

- A. The contractor shall engage the services of a registered Land Surveyor to stake the location and elevation of all parking areas, catch basins, curbing, etc.
- B. Upon completion of the work the contractor's Land surveyor shall furnish a certified topographic As-Built drawing showing the as-built location and elevation of all buildings, parking areas, driveways, landscape areas, utility locations, etc.

2 PART 2 - PRODUCTS

2.1 MATERIALS

- A. Except as otherwise specified, all fills, refills and backfills within the building areas and for paved areas, utilities, and appurtenances required in structural or site excavation shall be made with gravel, crushed stone or sand as hereinafter specified.
 1. Gravel shall be composed of hard, durable stone and coarse to fine sand, not frozen and free from loam and undesirable organic matter, containing no stone having any dimension greater than two-thirds (2/3) of the depth of layer to be compacted. Gravel borrow or bank-run gravel shall conform to article m.02 of the CONNDOT standard specification form 816 and the following gradation requirements:

% PASSING BY WEIGHT	U.S. STANDARD SIEVE SIZE
3 1/2"	100
1 1/2"	55-100
No. 4	25-60
No.40	5-25
No. 200	0-5

2. Processed aggregate shall conform to the applicable requirements of CONNDOT Standard Specifications Form 814 section M.05 and shall have the following gradation:

% PASSING BY WEIGHT	U.S. STANDARD SIEVE SIZE
2 1/4"	100
2"	95-100
3/4"	50-75
1/4"	25-45
No. 40	5-20
No. 100	2-12
No. 200	0-8

3. Material for use as pipe bedding shall conform to the following requirements:

It shall be sand or sandy soil all of which passes a 3/8" sieve and not more than 10% passes a No. 200 sieve.

- B. Common borrow and all refills and fills not supporting or influencing structures, pavement, or utilities shall be made with approved granular material containing sound stone, gravel and sand, free of frozen materials, silt, clay, vegetation, roots, peat, muck or other unsuitable matter.
- C. The use of on-site materials for fills, refills, or backfills will be permitted provided the material meets the above requirements. Additional material required for structure fill shall be provided from off-site sources and shall meet the above requirements.
- D. For lab testing see Div. 1.

3 PART 3 - EXECUTION

3.1 UNSUITABLE OR EXCESS MATERIALS

- A. All topsoil and unsuitable or excess materials shall be stripped to their entire depths from areas of new construction or regrading. Materials suitable for use shall be stored in approved locations that will not interfere with building or utility operations. Topsoil shall be stripped and stored before any underlying excavating is begun. Stripped topsoil to be reused shall be free from clay, large stones and debris. All unsuitable and surplus materials shall be excavated and legally disposed of off-site.

3.2 GRADES AND ELEVATIONS

- A. The Drawings indicate, in general, the alignment and invert and finished grade elevations of all structures and utilities; the Owner's Representative, however, may make such adjustments in grades and alignment as are found necessary in order to avoid interference and to adapt the utilities and piping to other special conditions encountered. Grading between indicated final

grades shall provide smooth even surfaces, except as otherwise required. Cover over pipes shall, in any case, conform to requirements of local and state agencies having jurisdiction.

3.3 SEQUENCE OF EARTHWORK

- A. Within the Contract area operations to conform to a specified sequence of general excavation, structure excavation as required for footings, slabs and foundation units, backfill and completion of the subgrade, will be conducted. Refer to the geotechnical Report for specific excavation, backfill and compaction requirements.
- B. The subgrade is herein defined as the top surface of those existing materials, and of fills and refills, not including base materials or surface materials.
- C. After clearing and grubbing, and stripping of topsoil and unsuitable or excess materials, excavate and remove all materials above the subgrade level.
- D. Excavation shall be performed to elevations and dimensions indicated, plus sufficient space to permit erection of forms and shoring, drains, masonry and the inspection of foundations.
- E. Immediately after excavations to the required grades, the exposed surface of the in-site materials shall be cleaned of all loose or disturbed materials. The surface of all structural excavations shall be thoroughly compacted.
- F. If suitable bearing for foundations is not encountered at the depth indicated on the Drawings, or in the excavations required in these Specifications, immediately notify the Owner's Representative. Remove any remaining unsuitable material as directed. The Owner's Representative shall be the sole judge of the suitability of all materials. Placing of footings, foundation walls or compacted gravel on unsuitable material will not be permitted.
- G. If rock is encountered at the required elevations, the rock shall be over-excavated and replaced with a minimum of twelve (12) inches of compacted gravel to the elevation of the bottom of the footing.
- H. Bottoms of excavations shall be protected from frost and from water whatever the source. Foundation units, footings or slabs shall not be placed on frozen ground nor on saturated materials. No excavation shall be made to the full depth indicated when freezing temperatures may be expected, unless the footings or slab can be poured immediately. The bottoms so excavated shall be protected from frost and water if placing or concrete is delayed.
- I. The Contractor shall sheet, shore and brace all excavations, if necessary, to prevent cave-ins. Sheeting, shoring and bracing shall be removed before backfilling is completed.

- J. Required excavations and excavations below or beyond the indicated or authorized limits shall be refilled with gravel compacted to the indicated percent of the maximum dry density at optimum moisture content as specified herein at no additional expense to the Owner's Representative.

95%	Pavement
85%	General

- K. After all required excavations have been made and the footings, foundations units and foundations walls have been constructed the Contractor shall place and compact suitable backfill to the subgrade level in lifts as hereinafter specified.
- L. All fills and refills to the subgrade level shall be made with approved materials as specified. Immediately prior to placing the improvements, clean up the subgrade by removing and replacing any unsuitable materials as previously defined.

3.4 SITE EXCAVATION, FILL AND BACKFILL

- A. Perform all site excavation, fill, backfill and compaction required for the various utilities, structures, conduits, roads and appurtenances thereto and for all site grading.
- B. Trench widths shall be sufficient to permit proper installation of the work and bottoms of trenches shall be evenly graded. The maximum allowable width of trench for pipe shall be as indicated on the Drawing. Excavations below required depths shall be refilled with compacted gravel. Immediately after trench excavations have been carried to the required grades, the exposed surface of the existing bottom materials shall be cleaned of all loose or disturbed materials. Where the trench bottom is below the water level or within saturated earth materials, the bedding shall be crushed stone. Pipe beds shall rounded to accommodate the bottom quadrant of the pipe and bell holes shall be excavated to provide full support and uniform bearing for the entire length of the pipe barrel.
- C. After piping and conduits have been installed, tested, inspected and approved by the Owner's Representative, gravel in which stones larger than 2 inches in size have been removed, unless otherwise detailed on the Drawings, shall be carefully hand placed and hand tamped in six (6) inch layers under, around, and to a level one (1) foot above the top of the piping and conduits. The remaining excavation shall be backfilled with approved granular materials from on-site excavations, compacted in one (1) foot layers loose measure.
- D. Information shall be obtained from the proper authorities concerning locations of all utilities within the scope of this work, in order that there will be no damage done to such utilities. Neither the Owner nor the Owner's Representative shall be responsible for any such damage and any resultant

damage shall be restored to any structure and repaired without additional compensations.

1. Rules and regulations governing the respective utilities shall be adequately protected from damage, and shall not be removed or relocated except as indicated or directed. Inactive and abandoned utilities encountered in excavation and grading operations shall be removed, plugged or capped, as directed. The locations of such abandoned utilities shall be reported in writing to the Owner's Representative.
- E. Excavation of earth beyond indicated or authorized limits shall be refilled, at no additional expense to the Owner, with gravel compacted to 85 percent of the maximum dry density as required by the Owner's Representative.
- F. Excavations shall be adequately sheeted, shored and braced, as necessary, to permit proper excavation of the work and to protect all slopes and earth banks. Sheet piling shall be installed as required to prevent cave-ins or settlement and to protect workmen, adjacent structures and utilities. Shoring and sheet piling may be removed as the backfilling progresses, but only when banks are safe against caving. The Owner's Representative may direct that sheet piling, shoring and bracing, be left in place at any time during the progress of the work, and direct that timber be used for sheet piling and bracing, authorized to be left in place, be cut-off at a specified elevations. In removing sheet piling or bracing, care shall be taken to prevent voids. Voids, if formed, shall immediately be filled with sand. Dewatering shall be performed, as required, for all excavations below ground water level.
- G. Dig test pits at the locations selected and to the dimensions directed by the Owner's Representative for compaction testing or to establish locations of existing pipelines or any other buried item for which the exact location is to be determined. The excavation, protection and backfilling of test pits shall be in accordance with the provisions of this Section. The maximum depth of test pits shall generally be ten (10) feet, measured from the average ground surfacing existing at the test pit location immediately prior to digging each pit. Test pits shall be backfilled with approved materials and compacted to the densities specified.

3.5 ROCK EXCAVATION

- A. All rock encountered within the limits of excavation shall be removed as may be required to complete the work of this contract, as shown on the Drawings and as specified herein.
- B. Rock excavation shall include the excavation, removal and disposal of all boulders 1 cubic yard or more in volume.
- C. Where boulders are exposed on the sides of, or in the bottom of the trenches or excavations for structures, they shall be wholly or partially removed, as directed; boulders shall be removed to limits not less than twelve (12) inches below and to the trench width lines indicated, and shall be removed to limits

not less than twelve (12) inches outside below the structure walls or the underside of structure foundation slabs. Depressions resulting from the removal of boulders shall be refilled with approved compacted gravel.

- D. Blasting will be permitted at locations near existing structures pipelines, drain pipelines, gas pipelines, electrical cables, or other utilities. Where explosives are used, work shall be done by experienced powdermen, using small charges and in strict accordance with all regulations governing this work. The Contractor shall take every precaution to protect persons, property and the work.

3.6 PLACING FILL

- A. Foundations for fills, refills and backfills shall be prepared in an approved manner by removing all excess and unsuitable materials. The base or other surface of fills, refills or excavations which have been allowed to weather and which in the option of the Owner Representative, are unsuitable, shall be removed and replaced with crushed stone or gravel or shall be dried, roughened or scarified, and then compacted before any additional fills or refills are placed on them.
- B. Materials placed shall, unless permitted or required, be specially compacted by depositing in approximately horizontal layers not exceeding six (6) inches in thickness before compaction and, unless sufficiently moist as spread, shall be wetted to near the optimum moisture content. Each layer shall be compacted by suitable vibratory compactors or tampers, as previously approved by the Owner Representative, which will secure the required minimum degree of compaction. No other type of equipment shall be used for compaction.
- C. Materials used in refills and backfills shall be deposited carefully to avoid injury to structures, conduits or pipes.
- D. The areas to be fine graded for loaming and seeding shall be raked to remove all stones and other unsatisfactory material and shall then be rolled as directed under this Section. Any depressions which may occur during the rolling shall then be filled with additional suitable material and the surface then regraded and rolled until true to the lines and grades required. Care shall be taken not to affect the line or grade of walls and footings during grading and rolling operations.

3.7 COMPACTION

- A. Fills placed under pavements, utilities and storm drainage systems shall be compacted to not less than 90 percent of the ASTM maximum dry density, except that the top six (6) inches below subgrade shall be compacted to 95 percent of maximum dry density. Fills in playing fields and planting areas shall consist of approved on-site material and shall be compacted to not less than 85 percent of the ASTM maximum dry density.
- B. Where vibratory compaction equipment is specified herein or is directed to be used by the Owner's Representative all such equipment whether plate-

type or roller shall be furnished with a vibrating surface at least 24 inches in width, and capable of operating at a minimum of 2,000 blows per minute. Equipment not specifically designed as vibrating compaction equipment shall not be permitted for compaction of either existing in-place materials or of fills, refills and backfills. Jack hammers, rubber-tired vehicles and similar equipment not specifically designed and manufactured for compaction of granular materials will not be approved for use.

- C. Surfaces to be compacted shall, unless otherwise specified, be compacted by not less than six (6) complete passes of approved vibratory compactors, in order to obtain the required percentage of compaction. A complete pass shall consist of the entire coverage of the surface area to be compacted with one trip of the equipment. Each trip of equipment shall overlap the previous trip by at least one (1) foot.
- D. Dumping, spreading preparing and compacting of several layers of fill materials across the site may be performed simultaneously, providing there is sufficient total area to permit these operations to proceed in a systematic manner.
- E. No rolling equipment shall be used to compact fill, refill or backfill materials within five (5) feet of the vertical faces of any concrete walls or utility pipes. Plate vibratory tampers shall be used in these restricted areas, and in other areas too confined to satisfactorily use rolling equipment.
- F. It is the intent of these compaction requirements that the minimum in-place dry density of the compacted materials resulting will be equal to or greater than the minimum percentage specified herein. Additional compaction shall be required if the minimum percentages of ASTM in-place dry densities as specified are not obtained.

END OF SECTION

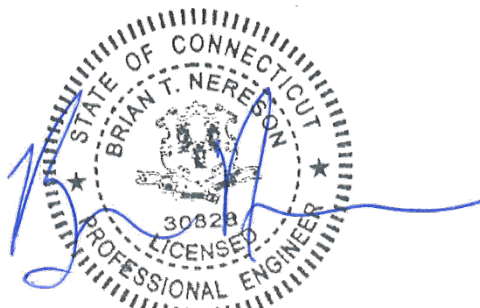


**GEOTECHNICAL ENGINEERING ASSESSMENT
ANSONIA HIGH SCHOOL - PROPOSED MAINTENANCE GARAGE
20 PULASKI HIGHWAY
ANSONIA, CONNECTICUT**

January 28, 2020
GeoInsight Project 9586-000

Prepared for:

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**GEOTECHNICAL ENGINEERING ASSESSMENT
ANSONIA HIGH SCHOOL - PROPOSED MAINTENANCE GARAGE
20 PULASKI HIGHWAY
ANSONIA, CONNECTICUT**

1.0 INTRODUCTION

GeoInsight, Inc. (GeoInsight) prepared this report to present the results of a geotechnical engineering assessment prepared for Donald W. Smith, Jr., P.E. Consulting Engineer (Donald W. Smith) for the above-referenced project. Included herein is our assessment of subsurface conditions as they relate to foundation design and earthwork construction for the proposed project at the Ansonia High School campus located at 20 Pulaski Highway in Ansonia, Connecticut (the "Site;" see Figure 1). This report is subject to the Limitations included herein.

1.1 PROJECT INFORMATION

GeoInsight's understanding of the existing Site conditions and the proposed project understanding is based review of a plan titled *Grading, Utilities & Erosion Control*, dated January 3, 2020 and prepared by Donald W. Smith, and observations of the Site. Refer to the attached Figure 1 for existing and proposed Site conditions, as described in the following paragraphs.

The Site is an approximately 1-acre portion of land located in the southern portion of the Ansonia High School campus, immediately northwest of the southern-most parking lot. The Site is a primarily wooded area, with ground surface sloping gradually downward from southeast to northwest, from approximately elevation (El.) 396 feet to El. 390 feet along the existing parking lot to the southeast of the Site, to approximately El. 376 feet at the northwest side of the site where an existing garage is located.

The proposed project generally consists of developing the Site with the new maintenance garage and associated paved parking areas and stormwater management structures. The new garage is planned to be located in the southeastern portion of the Site, and is planned to be 60 feet by 100 feet in plan dimensions and have a finished floor elevation (FFE) that slopes from southeast to northwest from El. 385.7 feet to El. 385.0 feet. A new paved parking area is planned immediately northwest of the new building, and a stormwater management basin is planned to the northwest of the parking area. Access to the Site is planned to be provided by a new driveway extending to the southwest of the parking area. Cutting of approximately 1 to 4 feet is planned to achieve the proposed building FFE. Minor cuts and fills (less than approximately 1 foot) are planned throughout the non-building areas of the Site, with the exception of the proposed stormwater management basin, where cutting of up to approximately 6 feet is planned.



2.0 SUBSURFACE EXPLORATION PROGRAM

Subsurface explorations at the Site were conducted on January 16, 2020 and consisted of a total of six geotechnical borings identified as B-1 through B-6. The borings were drilled by Seaboard Drilling, Inc. of Chicopee, Massachusetts using a Diedrich D-50 all-terrain vehicle drill rig and hollow-stem augers.

Boring locations were selected based upon the *Grading, Utilities & Erosion Control* plan referenced herein. The boring locations were established in the field based upon proposed building corner survey flags laid out by Donald W. Smith, and by taping from those survey flag locations. The approximate locations of the borings are shown on Figure 1.

Borings were advanced to depths ranging from approximately 7.1 to 10.6 feet below ground surface (bgs). Split-barrel sampling via the Standard Penetration Test (SPT, American Society for Testing and Materials [ASTM] International D-1586-11) was conducted in each boring continuously from ground surface to the termination depths of the borings. The summation of the blows necessary to collect the SPT samples from the 6 to 18-inch interval is called the Standard Penetration Number, which is used as an indicator of the soils' inherent *in situ* density.

GeoInsight oversaw the subsurface explorations, collected soil samples, measured apparent groundwater levels, and prepared boring logs. Soil samples were placed in sealed containers and returned with the field logs to GeoInsight's office for further evaluation. Soil samples were classified in general accordance with visual and manual procedures (ASTM D-2488) and described using modified Burmister Soil Classification System descriptors. The final boring logs are included as Appendix A. Stratification lines shown on the boring logs represent approximate boundaries between soil types encountered. The actual transitions will likely be more gradual and may vary over short distances.



3.0 SUBSURFACE CONDITIONS

3.1 GENERAL

The soil profile and conditions outlined below highlight the major subsurface stratifications at the Site. The individual boring logs should be consulted for detailed descriptions of the subsurface conditions encountered at each exploration location. When reviewing the subsurface exploration records and the subsurface profile, it should be understood that soil conditions might vary between and away from the boring locations. The findings of this report are less likely to apply to areas not explored as a function of increased distance away from the specific boring locations. Variations in subsurface conditions are possible laterally and with depth that are not identified on the boring logs, or otherwise in this report.

3.2 OVERBURDEN SOILS

Overburden soil conditions encountered in the subsurface explorations are described below in order of increasing depth below ground surface.

Topsoil: Organic topsoil was encountered at ground surface at each of the borings, and was observed to be approximately 2 to 6 inches thick.

Native Subsoil: A native subsoil layer was encountered at each of the borings directly below the surficial topsoil layer to depths ranging from approximately 2 to 2.5 feet bgs. The native subsoil was generally described as very loose to medium dense, light brown, red-brown or brown, silt, with minor proportions of gravel and fine to medium sand, and trace amounts of fine roots.

Native Till Deposit: A native till deposit was encountered directly below the native subsoil at borings B-2 and B-4. The till deposit was observed to be 4 to 4.5 feet thick, and was generally described as light brown, fine to medium sand with some to little gravel and trace amounts of silt. The relative density of the till layer was loose in the upper 2 feet of the deposit and medium dense to dense below the upper 2 feet. The lower relative density of the shallow portion of the deposit may indicate soil softening related to seasonal freeze/thaw.

Weathered Rock: A layer of highly weathered bedrock was encountered at each of the borings either directly below the subsoil layer or below the native till. The weathered bedrock layer was generally described as medium dense to very dense, highly weathered mica schist. The gradation of the weathered rock layer generally ranged from fine to medium sand with some gravel and some silt to fine sand and silt with little amounts of gravel. Where the weathered bedrock layer was within approximately 4 feet from ground surface, the portion within approximately 4 feet bgs was observed to have lower relative density, again likely related to seasonal freeze/thaw.



3.3 REFUSAL SURFACES

SPT sampler refusal was encountered in each of the soil borings, ranging from approximately 7.1 to 10.6 feet bgs. Core samples were not obtained from the refusal surfaces to evaluate the type, composition or quality of the refusal surfaces; however, we anticipate the refusal surfaces may indicate either intact bedrock or bedrock with a lower degree of weathering than the highly weathered bedrock layer described above.

3.4 GROUNDWATER

Groundwater was not observed in the borings, which were drilled to depths ranging from approximately 7.1 to 10.6 feet bgs, which corresponds to approximately El. 381.4 feet to El. 371.6 feet. Groundwater presence (or lack thereof) was based upon observation of soil samples recovered from the borings, which indicated unsaturated soil conditions. Groundwater may be shallower or deeper during seasonal periods different than those at the time of drilling, and generally will fluctuate due to season, temperature, precipitation, nearby underground utilities, and/or construction activity in the area. Water levels during and following construction may vary from the groundwater measurements reported herein. Groundwater levels were recorded in January 2020, which is typically a seasonally moderate groundwater table. Groundwater levels should be expected to be shallower than those observed at the boring locations during seasonally wet periods, such as spring.



4.0 GEOTECHNICAL ENGINEERING RECOMMENDATIONS

4.1 FOUNDATION TYPE AND DESIGN CRITERIA

The Site is suitable for support of the proposed building on conventional shallow spread and continuous footing foundations, provided proper subgrade preparation is performed.

DESCRIPTION	DESIGN RECOMMENDATION
Foundation type	Conventional shallow spread and continuous footings
Bearing material	Prepared native till (gravelly sand) ¹ or weathered bedrock ¹ , or compacted structural fill ² placed over prepared native till (gravelly sand) ¹ or weathered bedrock ¹
Maximum net allowable bearing pressure	5,000 pounds per square foot (psf)
Minimum foundation widths	36 inches for columns; 24 inches for walls ³
Minimum embedment below finished grade for frost protection (exterior footings)	42 inches
Minimum embedment below finished floor grades for interior footings not exposed to weather	24 inches
Estimated total settlement	less than 0.75 inch ^{1,2,3}
Estimated differential settlement	less than 0.375 inch: between adjacent columns or over 40 feet of distance for continuous footings ^{1,2,3}
Coefficient of sliding friction	0.55 ⁴
Passive earth pressure - equivalent fluid weight	300 pounds per cubic foot (pcf) ⁵
Notes: 1. Subgrades should be prepared as discussed in Section 5.2. 2. Structural fill to be placed and compacted in accordance with Section 5.4. 3. The minimum width of strip footings directly below the slab, if present, should be at least 3 feet. 4. Based upon cast-in-place concrete placed on prepared native till (gravelly sand) or weathered bedrock, or compacted structural fill placed over prepared native till (gravelly sand) or weathered bedrock. 5. The recommended passive pressure equivalent fluid weight includes a factor of safety of 2.0.	



4.2 SLAB-ON-GRADE DESIGN CRITERIA

The Site is suitable for construction of a conventional soil-supported slab-on-grade ground floor, provided proper subgrade preparation is performed.

DESCRIPTION	DESIGN RECOMMENDATION
Floor slab system	Reinforced concrete slab-on-grade
Floor slab support	Minimum 12 inches of compacted, well-draining structural fill ¹ placed above prepared native inorganic subsoil ² , native till (gravelly sand) ² or weathered bedrock ²
Modulus of subgrade reaction (k)	300 pounds per cubic inch (pci)
Notes:	
1. Structural fill to be placed and compacted in accordance with Section 5.4.	
2. Subgrades should be prepared as discussed in Section 5.2.	

Concrete slabs should be constructed with concrete having a minimum compressive strength of 4,000 pounds per square inch and be at least 5 inches thick; increased thickness should be used in higher traffic areas, where higher wheel/equipment load conditions will occur, or where slab performance is more critical. The slab concrete should be underlain by a vapor barrier (depending upon the slab concrete curing techniques used), reinforced at least with heavy gauge welded wire fabric, and include proper construction joints to control the occurrence of shrinkage cracks. We recommend slabs be specifically jointed around columns and walls to permit soil-supported slabs and shallow foundations to move differentially. Where the potential exists for localized heavy floor loads, it is advisable that anticipated loading conditions be addressed with: the use of additional steel reinforcement within the slab; the use of haunched slab areas below zones of anticipated concentrated floor loads to distribute the weight; the addition of fibers into the concrete mix; and/or slab subgrade strengthening, such as the use of geosynthetics.



4.3 SEISMIC DESIGN CRITERIA AND LIQUEFACTION SUSCEPTIBILITY

BUILDING CODE REFERENCE	SITE CLASSIFICATION
2015 International Building Code (IBC)	C ¹
DESIGN PARAMETER	RECOMMENDED DESIGN VALUE
Maximum considered short period spectral response acceleration (S_{MS})	0.23
Maximum considered 1-second spectral response acceleration (S_{M1})	0.11
Design short period spectral response acceleration (S_{DS})	0.16
Design 1-second spectral response acceleration (S_{D1})	0.07
Notes: 1. The Site Classification is based upon the soil profile observed to maximum depths of approximately 10.6 feet bgs, and assumes weathered or intact bedrock is present below 10.6 feet bgs. 2. Based upon the subsurface conditions encountered in the borings, the Site is not considered susceptible to liquefaction in the event of an earthquake.	

4.4 LATERAL EARTH PRESSURES

The lateral earth pressure recommendations given in this section are applicable to the design of rigid retaining walls fixed against rotation or subject to slight rotation, such as cantilever or gravity type concrete walls. The recommendations are not applicable to the design of geogrid-reinforced, modular block walls backfilled with select materials.

In general, foundation walls, loading docks, and earth-retaining structures should be designed to resist lateral pressures generated by soil backfill materials and any temporary or permanent surcharge loads. At-rest conditions should be used for the design of loading dock walls, basement walls, and other walls that are not free to deflect or rotate. Walls that are free to deflect or rotate may be designed using active conditions. We assume that adequate drainage systems will be installed adjacent to below-grade structures, and thus hydrostatic forces have not been accounted for in the values provided herein. If drainage systems are not included in the design, the lateral pressures provided herein should be modified accordingly.



DESIGN PARAMETER	RECOMMENDED DESIGN VALUE	
	Active	At-Rest
Coefficient of Lateral Earth Pressure	0.33	0.5
Equivalent Fluid Unit Weight (pcf)	45	68

Notes:

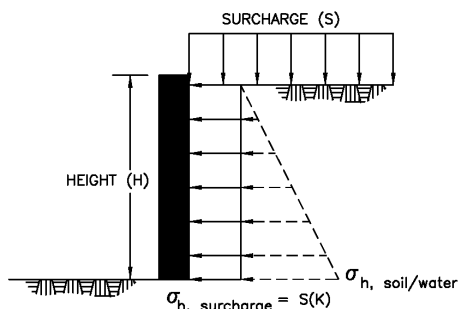
- The lateral earth pressure parameters are based upon Rankine's Lateral Earth Pressure Theory and should be used to compute the lateral earth pressures for flexible and rigid walls constructed with level backfill, whichever apply.
- For active pressure conditions to be developed, the wall must rotate about its base with lateral top movements of approximately 0.002H to 0.004H.

For sliding and overturning stability, the following design parameters are recommended for wall footings bearing directly on prepared native till (gravelly sand) or weathered bedrock, or compacted structural fill placed over prepared native till (gravelly sand) or weathered bedrock:

DESIGN PARAMETER	RECOMMENDED DESIGN VALUE
Unit weight of granular backfill (pcf)	135
Coefficient of sliding friction (μ)	0.55
Maximum foundation edge pressure (psf)	5,000

Notes:

- The recommended minimum factors of safety against sliding and overturning are 1.5 and 2.0, respectively.
- Lateral pressures are cumulative for computing overall safety factors. In no case should the lateral pressure be less than 200 psf (as a surcharge) to account for compaction equipment during construction.
- Wall backfill should be adequately drained to minimize hydrostatic forces behind walls. Free-draining fill and/or structural fill meeting quality control testing criteria is recommended for backfill.
- Diagram 1 depicts the active and at-rest wall loading conditions described herein.



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WHERE $\sigma_{h, \text{soil/water}}$ IS EQUAL TO THE LATERAL PRESSURE ON THE BACK OF THE WALL CAUSED BY SOIL AND WATER PRESSURE FOR A GIVEN LOADING CONDITION (ACTIVE OR AT-REST), GIVEN BY THE RECOMMENDED FLUID UNIT WEIGHT TIMES THE WALL HEIGHT

Diagram 1 – Lateral Earth Pressures for Earth Retaining Structures



4.5 FINISHED BUILDING ENVELOPE

The proposed building is expected to have a slab-on-grade ground floor at approximately El. 385 feet (\pm). Exterior ground surface along the southeastern exterior foundation wall and portions of the southwestern and northeastern exterior foundation walls are proposed to be higher in elevation than the floor slab. A foundation perimeter drain is recommended to be installed along the outside of exterior foundations where finished ground surface is higher than the interior slab elevation. The perimeter drain system should be constructed using 6-inch diameter perforated pipe surrounded by at least 6 inches of clean stone, which is enveloped in non-woven filter fabric such as Mirafi 140N or equal. The drain system should extend a minimum 12 inches beyond the outside edge of the footing and the invert of the drain should be not higher than the bottom of the base under the floor. The perimeter drain system should be sloped such that it collects water and then drains by gravity to approved receptors or discharge locations. If gravity discharge of the drain system is not possible, a collection sump and ejector pump system will be required to facilitate water removal, and the sump should be connected to an auto-start generator system to continue water removal even during power outages. Additionally, foundation walls that enclose interior spaces and floors below the exterior grade should be dampproofed in accordance with section 1805 of the IBC.

Based upon absence of groundwater observed in the borings, floor slab underdrains are not expected to be necessary.

An impervious cover should be placed at the exterior ground surface adjacent to the proposed building to reduce infiltration of surface runoff directly adjacent to the foundation and the underside of the lowest floor slab should also include a moisture barrier material to ensure proper slab curing during construction. Additionally, backfill placed around the exterior foundation walls should consist of free-draining material.

4.6 PAVEMENT DESIGN

Pavement design parameters (i.e., traffic loading, serviceability factors, etc.) were not provided for design of pavements for the new development. Therefore, the pavement designs provided herein are based upon assumptions made using engineering judgment and experience with similar developments.

Upon completion of proper subgrade preparation, the following minimum pavement sections are recommended for parking and driveway areas. Reference is made to materials described in the *State of Connecticut Department of Transportation (CT DOT) Standard Specifications for Roads, Bridges and Incidental Construction, latest edition.*



LAYER AND MATERIAL TYPE	THICKNESS (INCHES)	
	STANDARD PASSENGER CAR AREAS	PRIMARY ENTRANCE DRIVES (HEAVY DUTY PAVEMENTS)
Bituminous Finish Course (CT DOT Section 4.06 & M.04, Class 2 or 3)	1½ inches	1½ inches
Bituminous Binder Course (CT DOT Section 4.06 & M.04, Class 1 or 2)	2 inches	2½ inches
Crushed or Processed Gravel Base Course (CT DOT Section 3.02 & M.02.03/06, Grading C or Section 3.04 & M.05.01)	6 inches	6 inches
Dense Graded Sand and Gravel Subbase (CT DOT Section 2.12 & M.02.02/06 Grading B)	6 inches	8 inches

We recommend the pavement grading design consider provisions for preventing water (surface or irrigation) from entering the pavement section in order to reduce the likelihood of accelerated pavement deterioration. This could be accomplished by sealing the interface between the asphalt edge and adjacent curbing, and using edge drains.

In order to minimize the downward seepage of surface water into the base course, we recommend requiring the filling/sealing of all joints at pavement/curb interfaces, as well as all pavement cracks, which might form in the early life of the pavement. This should be done as an on-going maintenance activity using a hot-applied, “rubberized” asphaltic sealant, or equivalent material. In particular, the need to apply a sealant should be assessed following normal shrinkage of the asphaltic concrete away from the curbs and other features, which may occur several months after pavement installation.

The recommended pavement sections included herein are designed to support post-construction traffic only, and are not designed to support construction traffic. Soil subgrade conditions are presumed to remain as encountered in the borings, without deleterious effects (increased silt, mud, or moisture content), due to equipment traffic during construction. It will be important to evaluate subgrade conditions in the field during construction and re-compact, undercut, or stabilize if necessary to achieve clean and stable subgrade conditions.



5.0 CONSTRUCTION CONSIDERATIONS

5.1 INITIAL SITE PREPARATION

Initial Site preparation should commence with stripping of vegetation, topsoil, and subsoil with roots from proposed building and pavement areas. Stripping depths will likely vary across the Site and should be adjusted to remove vegetation and root systems.

Tree removal should be done during initial Site preparation. Care should be taken to thoroughly remove root systems from the proposed buildings and pavement areas. Materials disturbed during removal of stumps should be undercut.

Inorganic soils removed during Site stripping operations could be used for final Site grading outside the proposed building and pavement areas. Care should be exercised to separate organic materials from non-organic materials to avoid mixing with fill planned for reuse.

5.2 SUBGRADE PREPARATION

GeoInsight should be retained to provide construction oversight of foundation, floor slab, and pavement subgrade preparation. Subgrades should be prepared and reviewed as described in the following paragraphs.

Footings Subgrades: Footings have been designed to bear on subgrades consisting of prepared native till (gravelly sand) or weathered bedrock, or compacted structural fill placed above prepared native till (gravelly sand) or weathered bedrock.

Subsoil with roots is not expected to be present at design footing subgrade elevations. Although not anticipated, if subsoil with roots is encountered at footing subgrade elevations, the organic-containing soils should be over-excavated to the top of native till (gravelly sand) or weathered bedrock, and should be replaced with compacted structural fill to achieve the footing bearing elevation.

Following excavation to achieve design footing subgrades, the resulting native till (gravelly sand) or weathered bedrock subgrades should be aggressively proof-rolled with at least six passes (three each way in perpendicular directions) of a minimum 10-ton vibratory roller in open areas, or a 1-ton vibratory roller or large plate compactor in trenches. During the proof-rolling process, the subgrades should be reviewed to identify soft or unstable areas. Unsuitable areas should be over-excavated to more competent material and be replaced with compacted structural fill, as needed.

Where over-excavation of unsuitable material is necessary below footings, the extent of over-excavation should include the foundation bearing zone, which is defined as the area within the 1 horizontal to 1 vertical (1H:1V) lines extending down and away from the bottom outside edges of footings to the top of suitable soils (see Diagram 2). Following proof-rolling, compacted structural fill may be placed in the footing bearing zones or below the slab to achieve design foundation bearing subgrade elevations, if needed.

Care must be taken to avoid disturbing the prepared subgrades by keeping construction traffic off the subgrade to the extent practical. Excavated subgrades should not be left exposed overnight unless the forecast calls for above-freezing, clear conditions. If snow or freezing conditions are expected, exposed subgrades should be covered with insulated blankets or other easily removed materials.

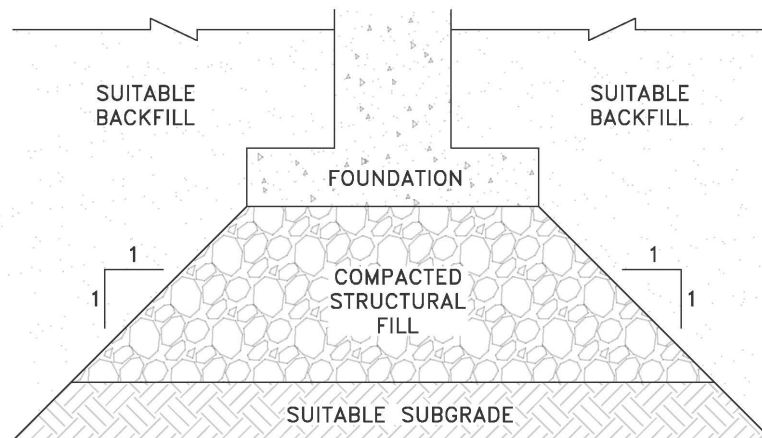


Diagram 2 - Minimum Foundation Bearing Zone

Slab Subgrades: The building slab has been designed to bear directly on a minimum 12 inches of compacted structural fill placed above on subgrades consisting of prepared suitable subsoil, native till (gravelly sand) or weathered bedrock.

Subsoil is expected to be suitable to remain in place below the proposed floor slab provided the subsoil:

- contains not greater than 5 percent organics consisting of fine roots;
- is thoroughly proof-rolled;
- is relatively firm, dry and stable after proof-rolling; and
- is reviewed by the project geotechnical engineer or his/her representative and confirmed to be suitable to remain in place.

Unsuitable subsoil should be over-excavated to the top of suitable subgrades and should be replaced with compacted structural fill to achieve the slab bearing elevation.

Following excavation to achieve design slab subgrades, the resulting suitable subsoil, native till (gravelly sand) or weathered bedrock subgrades should be aggressively proof-rolled with at least six passes (three each way in perpendicular directions) of a minimum 10-ton vibratory roller in open areas, or a 1-ton vibratory roller or large plate compactor in trenches. During the proof-rolling process, the subgrades should be reviewed to identify soft or unstable areas. Unsuitable areas should be over-excavated to more competent material and be replaced with compacted structural fill, as needed. Following proof-rolling, compacted structural fill may be placed to achieve the design slab bearing elevation.



Care must be taken to avoid disturbing the prepared subgrades by keeping construction traffic off the subgrade to the extent practical. Excavated subgrades should not be left exposed overnight unless the forecast calls for above-freezing, clear conditions. If snow or freezing conditions are expected, exposed subgrades should be covered with insulated blankets or other easily removed materials.

Pavement Areas: Pavement subgrades are expected to consist of prepared suitable subsoil, native till (gravelly sand) or weathered bedrock. Pavement subgrades should be prepared and reviewed consistent with the recommendations provided above for slab subgrades.

5.3 CONSTRUCTION DEWATERING

Based upon groundwater levels at the depths observed in the borings (or lack thereof), significant construction dewatering is not anticipated for construction of the proposed foundations or relatively shallow subsurface utilities at the Site. However, dewatering could be required to remove surface water runoff or precipitation that accumulates within excavations and does not quickly infiltrate.

In general, it should be practicable to accomplish construction dewatering, where required, through sumps and open pumping methods. The contractor should be required to maintain groundwater at least 2 feet below excavation subgrades in order to minimize bearing surface disturbance.

Surface water runoff should be directed away from excavations to reduce potential dewatering efforts and protect subgrades from becoming soft and unstable. Temporary detention ponds, trenches, ditches, and other groundwater or stormwater control systems should be carefully planned and designed so as not to conflict with new areas to be excavated and/or backfilled.

5.4 FILL AND BACKFILL

Soil Reuse: Based upon visual classification of the soils encountered during the subsurface exploration program, the existing near-surface soils are not expected to be suitable for reuse as structural fill due to the relatively high percentage of fine-grained materials within the soil matrix. Blending of granular, inorganic, on-site excavated soils with coarser off-site borrow would likely be required for the on-site soils in order to achieve a well-graded mixture for reuse as structural fill. In general, the near-surface inorganic soils may be suitable for reuse as common fill, provided the soils intended for reuse are properly stockpiled, dried, moisture conditioned, etc., in order to achieve adequate compaction during placement.

General: Soils approved for reuse should be segregated and stockpiled. Prior to reuse, grain-size distribution testing will be required for proposed fill soils in order to evaluate their suitability for reuse. The moisture-density relationship (Proctor Test) of soil confirmed for reuse as fill will be required to provide compaction criteria for use during fill placement. Working moisture content for moisture-sensitive soils typically ranges from about minus two to plus one percent (-2% to +1%) of the optimum moisture content as determined from a Proctor Test.



Compacted structural fill should be used as fill or backfill below proposed building foundations and floor slabs, and as backfill against foundations (within 24 inches laterally from foundations walls). Compacted structural fill below proposed foundations should extend to the lateral limits defined by a 1H:1V line sloped down and away from the bottom outside edge of footings to the top of suitable soil, as described in Section 5.2 (see Diagram 2). Crushed stone (nominal ¾-inch) may be used in lieu of structural fill at the direction of the geotechnical engineer or his/her representative where subgrades become saturated and over-excavation of saturated soils is not feasible. Crushed stone, if used in thickness greater than 6 inches, should be wrapped in a geotextile filter fabric, such as Mirafi 140N or equivalent, to reduce the potential for migration of fine-grained particles into the voids present within the stone. Walls should be backfilled evenly on both sides to the extent practical. Temporary bracing should be specified if unrestrained walls are permitted to be backfilled.

Bedding placed below utilities should be in accordance with the local utility or manufacturer requirements. In general, utilities may be supported by compacted structural fill, or other suitable pipe bedding materials. Fill placed as backfill for utilities below building floor slabs should consist of compacted structural fill. Elsewhere, fill placed as backfill for utilities may consist of compacted common fill after the pipe is surrounded by proper bedding soil.

Common Fill: Excavated soil from the Site may be reused as common fill provided it is inorganic, free of deleterious materials and can be adequately compacted. Common fill should consist of soil free from frozen soil, debris, or other deleterious material. The maximum particle size is recommended to be 8 inches, and no more than 30 percent by weight should pass the No. 200 sieve. Common fill may be used to achieve finished grades outside the building and foundation bearing zones, beyond 24 inches laterally from exterior foundations, or below pavements. Common fill used below pavements to achieve pavement subgrades (if necessary) should be generally consistent with on-site shallow soil gradation, particularly with regard to the percentage of fine-grained particles. Common fill should be placed in loose lifts not exceeding 12 inches in thickness for self-propelled vibratory rollers and 8 inches for vibratory plate compactors, and compacted to at least 92 percent of the maximum dry density determined by ASTM D 1557, Method C.

Structural Fill: Structural fill should be free of organic, frozen, or other deleterious material and conform to the gradation requirements outlined below. Structural fill should be placed in loose lifts not exceeding 12 inches in thickness for self-propelled vibratory rollers and 8 inches for vibratory plate compactors. Structural fill placed within the footing bearing zone and below floor slabs should be compacted to at least 95 percent of the maximum dry density determined by ASTM D 1557, Method C.



Structural fill should conform to the following gradation:

Sieve Size	Percent Passing
6 inches	100
1 inch	60-100
No. 4	35-85
No. 10	25-75
No. 20	15-60
No. 40	10-45
No. 100	5-25
No. 200	3-10

Note: Maximum 3-inch particle size within 12 inches of foundation and slab subgrade elevations, and within 2 feet of exterior walls.

5.5 EARTHWORK IN WET ENVIRONMENTS

Portions of the near-surface soils may contain a relatively high percentage of fine-grained particles (i.e., material passing the No. 200 sieve), based upon visual observations. In general, soil containing more than 10 percent fines will be sensitive to moisture, and compaction requirements will be difficult to achieve when the material is wet. The near-surface soils may be selectively reused as fill, provided they meet the recommended gradation criteria, are relatively dry, and can be adequately compacted. The use of silty soil as fill is applicable only during periods of construction when the climate and moisture are favorable for reusing silty soils. During wet environments, silty soils may be unsuitable for reuse if moisture is not carefully controlled.

5.6 TEMPORARY EXCAVATIONS

Excavations should be cut to a stable slope or be temporarily braced, depending upon the excavation depths and the subsurface conditions encountered. Temporary construction slopes should be designed in compliance with applicable governing regulations including the Occupational Safety and Health Administration (OSHA). Based upon the soil samples recovered from the test borings, the near-surface soils should be considered OSHA Type C soils. Temporary excavations should be sloped at not steeper than 1.5H:1V for excavations to a maximum depth of 20 feet bgs under dry, dewatered conditions.

Stockpiles should be placed at a distance away from the top of the excavation that is equal to at least the depth of the excavation. Surface drainage should be controlled to avoid flow of surface water into the excavations. Construction slopes should be reviewed for signs of mass movement, such as tension cracks near the crest or bulging at the toe. If potential stability problems are observed, work should cease, and the project geotechnical engineer should be contacted immediately. The responsibility for excavation safety and stability of temporary construction slopes should lie solely with the contractor.



5.7 WEATHERED ROCK REMOVAL

Rock encountered in the borings was observed to be highly weathered to the maximum depths of the borings at approximately 7.1 to 10.6 feet bgs. Based upon our current understanding of the proposed project, presence of intact bedrock is not expected with expected construction depths. It is anticipated that highly weathered bedrock as encountered in the borings will be excavatable with conventional excavation equipment. The use of a rock ripper attachment for the excavator may improve excavation efficiency. However, it should be understood that the pace of excavation may be slowed by the presence of weathered bedrock as compared to typical overburden soils.



6.0 LIMITATIONS

GeoInsight provided the recommendations contained within this report based upon an evaluation of subsurface conditions observed and/or reported and their relation to proposed construction, as documented in the report text and attached materials. The evaluations described and recommendations made in this report pertain to the specific areas explored. GeoInsight believes the subsurface explorations and evaluations described herein were performed in a manner consistent with the services that would have been provided by other geotechnical professionals under similar circumstances. However, given the variable nature of native soil deposits and rock formations, we cannot represent that the subsurface conditions identified in the soil boring logs and described in this report are exact, nor can we guarantee that our interpolation between or extrapolation from subsurface exploration locations is completely representative of actual conditions.

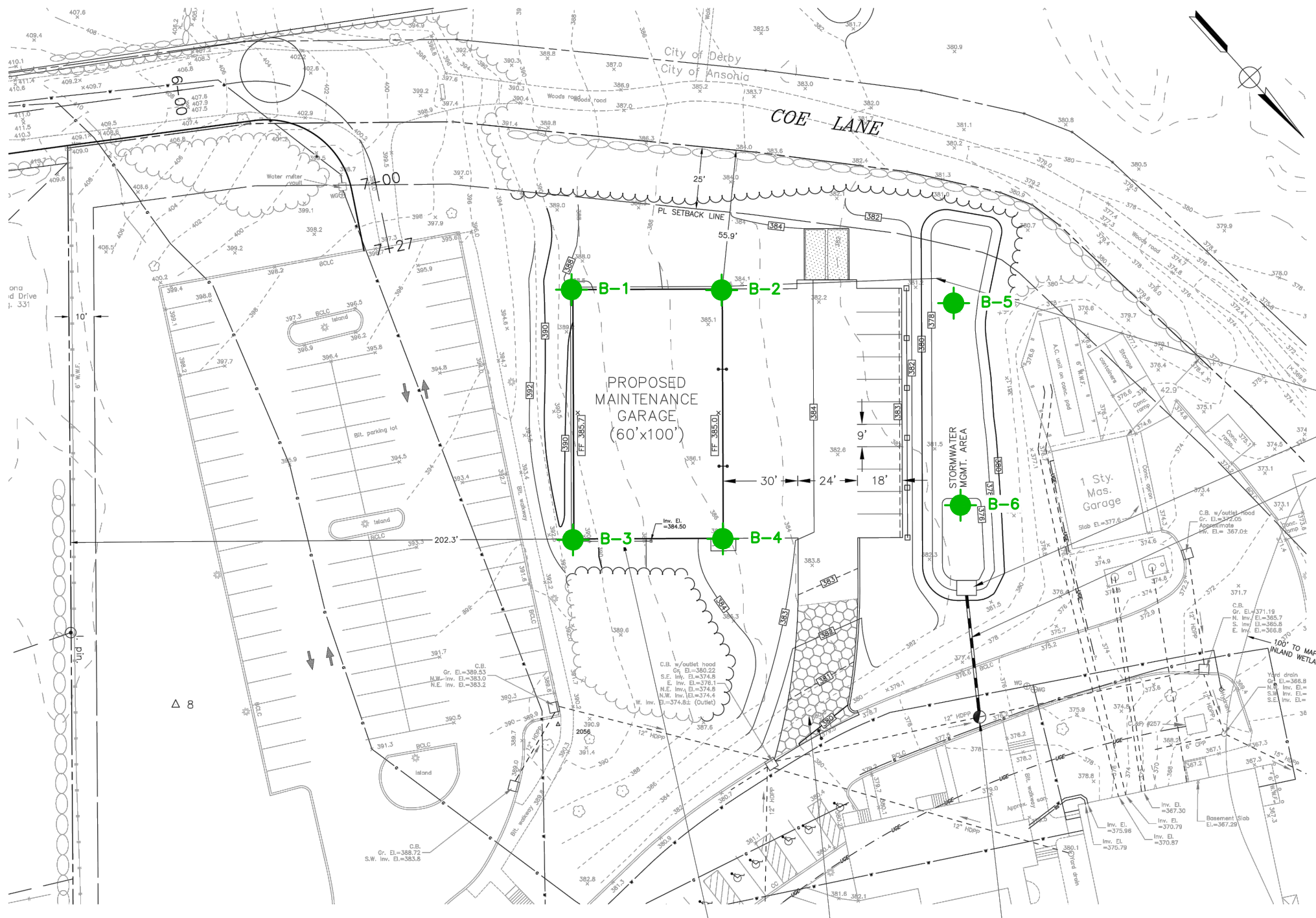
Participation by the geotechnical engineer should be considered an important aspect of successfully completing foundation and earthwork construction aspects of the project. In particular, if the geotechnical engineer is not engaged by the project team to perform regular foundation and earthwork inspections, it should be understood that there may be missed opportunities to recognize unexpected conditions in a timely manner that may otherwise allow for corrective actions to be implemented at minimum cost.

Should additional information become available regarding the proposed Site development that is significantly different from that described in this report, or should subsurface conditions be found during construction that vary significantly from those observed during the subsurface explorations and summarized in this report, GeoInsight should be given the opportunity to evaluate the data and modify its recommendations, if warranted.

This report and the recommendations included herein were based upon the project information known to us at the time our reporting, as defined by the Project Information section herein. If the project is altered or additional project details are developed after preparation of this report, GeoInsight should be contacted to review the project changes and/or additional details and to evaluate whether modifications to our recommendations are warranted. In particular, changes to proposed structure footprints, Site or structure elevations and/or structure loads may require modifications to the recommendations included herein.

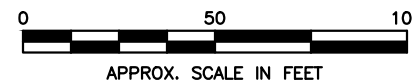
This report has been prepared for specific application to the Site located at 20 Pulaski Highway in Ansonia, Connecticut. No other warranty, expressed, or implied, is made. In addition, this report was prepared exclusively for Donald W. Smith, Jr., P.E. Consulting Engineer and the associated project team. The use of this report by other parties without written consent from GeoInsight is hereby prohibited.

FIGURE



**SUBSURFACE EXPLORATION
LOCATION PLAN**

1" = 10'



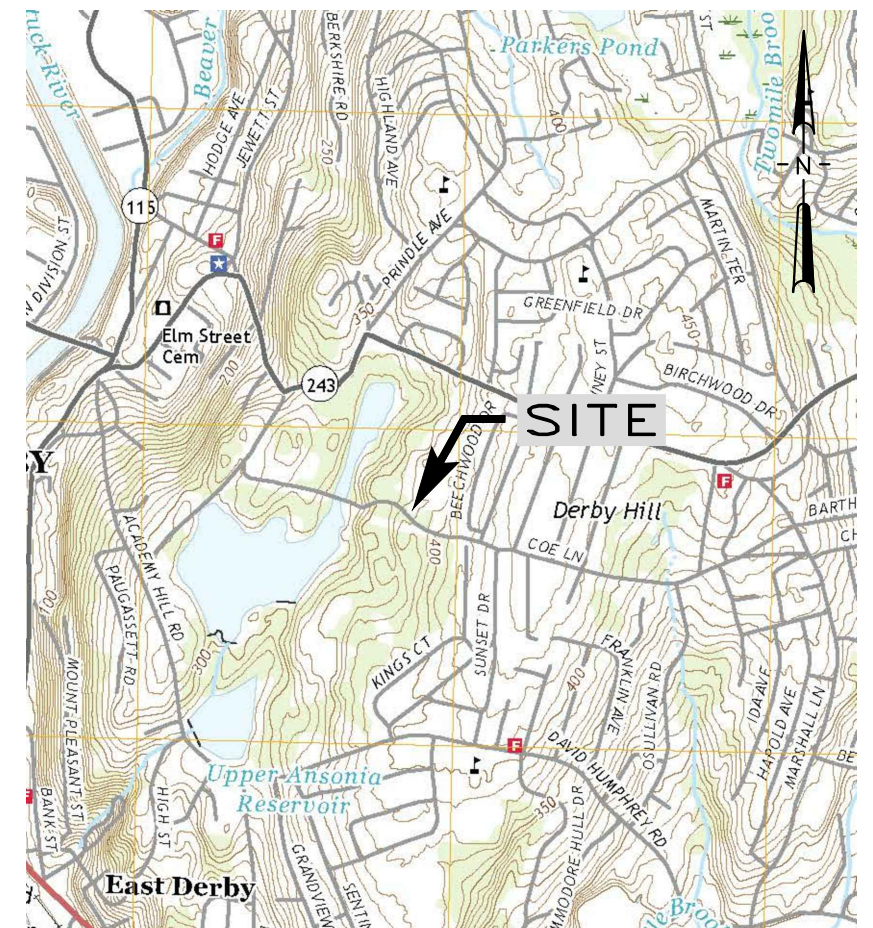
LEGEND

B-1 APPROXIMATE SOIL BORING LOCATION AND DESIGNATION

NOTES

1. SUBSURFACE EXPLORATION LOCATION PLAN IS BASED UPON A PLAN TITLED "GRADING, UTILITIES & EROSION CONTROL" DATED JANUARY 3, 2020 AND PREPARED BY DONALD W. SMITH, JR., P.E. CONSULTING ENGINEER..

2. SITE LOCUS IS BASED UPON USGS ANSONIA, CONNECTICUT TOPOGRAPHIC MAP DATED 2018, WITH CONTOUR INTERVAL OF 10 FEET.



SITE LOCUS

1" = 2000'

PLOT DATE: 1-23-20
FILE: I:\9586\9586D001.dwg

CLIENT: DONALD W. SMITH, JR., P.E. CONSULTING ENGINEER			
PROJECT: ANSONIA HIGH SCHOOL PROPOSED MAINTENANCE GARAGE			
TITLE: SUBSURFACE EXPLORATION LOCATION PLAN & SITE LOCUS			
DESIGNED: BTN	DRAWN: BTN	CHECKED: MCP	APPROVED: MCP
SCALE: AS SHOWN	DATE: 01/23/20	FILE NO.: 9586D001	PROJECT NO.: 9586



FIGURE NO.: 1

APPENDIX A
BORING LOGS



GeoInsight
Environmental Strategy & Engineering

SOIL BORING LOG

Client: Donald W. Smith Jr., P.E. Consulting Engineer

Boring Identification: B-1

Project: Ansonia H.S. - Proposed Maintenance Garage

Sheet: 1 of 1

Location: 20 Pulaski Highway, Ansonia, CT

Checked By: BTN

Project Number: 9586-000

Drilling Company: Seaboard Drilling, Inc.

Boring Location: Proposed south building corner.

Foreman: Dale

Ground Surface Elevation: 388.5 feet

Datum: Note 1

GeoInsight Engineer/Geologist: AHF

Date Started: 1/16/20

Date Completed: 1/16/20

DRILLING METHOD	SAMPLER	GROUNDWATER MEASUREMENTS			
Vehicle: ATV	Type: 2" SS (Auto)	Date	Depth (ft)	Reference	Stabilization
Model: Diedrich D-50	Hammer (lb): 140	01/16/2020	Not Encountered	NA	NA
Method: Hollow Stem Auger	Fall (in): 30				

DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE
	#	Pen/Rec (in)	Depth (ft)	Blows/6"				
0	S1	24/4	0-2	1	S1: 4" very loose, dark brown, fine to medium SAND, little organic Silt and fine Roots, damp.	TOPSOIL		
1				1		NATIVE SUBSOIL		
				2				
2	S2A	6/6	2-2.5	4	S2A: Loose, red brown, SILT, little fine Sand and Gravel, damp.	HIGHLY WEATHERED BEDROCK ^{NOTE 2}		
3	S2B	18/12	2.5-4	2				
				8	S2B: Loose, gray, highly weathered MICA SCHIST.			
4				9				
	S3	24/16	4-6	7	S3: Dense, gray, highly weathered MICA SCHIST.			
5				14				
				17				
6				24				
	S4	13/11	6-7.1	40	S4: Very dense, gray, highly weathered MICA SCHIST.			
7				83				
				50/1"				
8					Boring terminated at 7.1 feet upon split spoon refusal.			
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

GRANULAR SOILS		COHESIVE SOILS		NOTES
Blows/ft.	Density	Blows/ft.	Consistency	
0-4	V. LOOSE	<2	V. SOFT	
5-10	LOOSE	2-4	SOFT	
11-30	M. DENSE	4-8	M. STIFF	
31-50	DENSE	8-15	STIFF	
>50	V. DENSE	15-30	V. STIFF	
		>30	HARD	



GeoInsight
Environmental Strategy & Engineering

SOIL BORING LOG

Client: Donald W. Smith Jr., P.E. Consulting Engineer

Boring Identification: B-2

Project: Ansonia H.S. - Proposed Maintenance Garage

Sheet: 1 of 1

Location: 20 Pulaski Highway, Ansonia, CT

Checked By: BTN

Project Number: 9586-000

Drilling Company: Seaboard Drilling, Inc.

Boring Location: Proposed west building corner.

Foreman: Dale

Ground Surface Elevation: 384 feet

Datum: Note 1

GeoInsight Engineer/Geologist: AHF

Date Started: 1/16/20

Date Completed: 1/16/20

DRILLING METHOD	SAMPLER	GROUNDWATER MEASUREMENTS			
Vehicle: ATV	Type: 2" SS (Auto)	Date	Depth (ft)	Reference	Stabilization
Model: Diedrich D-50	Hammer (lb): 140	01/16/2020	Not Encountered	NA	NA
Method: Hollow Stem Auger	Fall (in): 30				

DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE
	#	Pen/Rec (in)	Depth (ft)	Blows/6"				
0	S1A	2/2	0-0.2	2	S1A: Very loose, dark brown, fine to medium SAND, little organic Silt and fine Roots, damp.	TOPSOIL		
1	S1B	22/14	0.2-2	1	S1B: Very loose, brown, SILT, little fine to medium Sand and Gravel, trace fine Roots, damp.	NATIVE SUBSOIL		
				2				
2	S2	24/16	2-4	3	S2: Loose, light brown and gray, fine to medium SAND, little Gravel, trace Silt, damp.	NATIVE TILL DEPOSIT		
				2				
3				8				
				9				
4	S3	24/8	4-6	9	S3: Dense, light brown and gray, fine to medium SAND, little Gravel, trace Silt, damp.			
				16				
5				19				
				20				
6	S4A	6/6	6-6.5	16	S4A: Medium dense, light brown and gray, fine SAND, trace Silt, damp.	HIGHLY WEATHERED BEDROCK ^{NOTE 2}		
				13				
7	S4B	18/11	6.5-8	12	S4B: Medium dense, gray, highly weathered MICA SCHIST.			
				14				
8	S5	21/21	8-9.7	14	S5: Very dense, gray, highly weathered MICA SCHIST.			
				59				
9				59				
				50/3"				
10					Boring terminated at 9.7 feet upon split spoon refusal.			
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

GRANULAR SOILS		COHESIVE SOILS		NOTES
Blows/ft.	Density	Blows/ft.	Consistency	
0-4	V. LOOSE	<2	V. SOFT	1. Datum based an Assumed Datum as shown on a plan titled Grading, Utilities & Erosion Control dated January 3, 2020 and prepared by Donald W. Smith Jr., P.E. Consulting Engineer. 2. The gradation of the Highly Weathered Bedrock generally ranged from fine to medium SAND, some Gravel, some Silt to fine SAND and SILT, little Gravel.
5-10	LOOSE	2-4	SOFT	
11-30	M. DENSE	4-8	M. STIFF	
31-50	DENSE	8-15	STIFF	
>50	V. DENSE	15-30	V. STIFF	
		>30	HARD	



GeoInsight
Environmental Strategy & Engineering

SOIL BORING LOG

Client: Donald W. Smith Jr., P.E. Consulting Engineer

Boring Identification: B-3

Project: Ansonia H.S. - Proposed Maintenance Garage

Sheet: 1 of 1

Location: 20 Pulaski Highway, Ansonia, CT

Checked By: BTN

Project Number: 9586-000

Drilling Company: Seaboard Drilling, Inc.

Boring Location: Proposed east building corner.

Foreman: Dale

Ground Surface Elevation: 390.4 feet

Datum: Note 1

GeoInsight Engineer/Geologist: AHF

Date Started: 1/16/20

Date Completed: 1/16/20

DRILLING METHOD	SAMPLER	GROUNDWATER MEASUREMENTS			
Vehicle: ATV	Type: 2" SS (Auto)	Date	Depth (ft)	Reference	Stabilization
Model: Diedrich D-50	Hammer (lb): 140	01/16/2020	Not Encountered	NA	NA
Method: Hollow Stem Auger	Fall (in): 30				

DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE
	#	Pen/Rec (in)	Depth (ft)	Blows/6"				
0	S1A	2/2	0-0.2	3	S1A: Very loose, dark brown, fine to medium SAND, little organic Silt and fine Roots, damp.	TOPSOIL		
1	S1B	22/7	0.2-2	3				
				4	S1B: Very loose, brown, SILT, little fine to medium Sand, trace Gravel, damp.	NATIVE SUBSOIL		
				8				
2	S2	24/15	2-4	18	S2: Dense, gray, highly weathered MICA SCHIST.	HIGHLY WEATHERED BEDROCK ^{NOTE 2}		
3				17				
				25				
				29				
4	S3	24/16	4-6	25	S3: Dense, gray, highly weathered MICA SCHIST.			
				25				
5				19				
6	S4	24/16	6-8	12	S4: Medium dense, gray, highly weathered MICA SCHIST.			
				12				
7				11				
8				13				
9	S5	9/7	9-9.8	30	S5: Very dense, gray, highly weathered MICA SCHIST.			
				50/3"				
10					Boring terminated at 9.8 feet upon split spoon refusal.			
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

GRANULAR SOILS		COHESIVE SOILS		NOTES
Blows/ft.	Density	Blows/ft.	Consistency	
0-4	V. LOOSE	<2	V. SOFT	
5-10	LOOSE	2-4	SOFT	
11-30	M. DENSE	4-8	M. STIFF	
31-50	DENSE	8-15	STIFF	
>50	V. DENSE	15-30	V. STIFF	
		>30	HARD	



GeoInsight
Environmental Strategy & Engineering

SOIL BORING LOG

Client: Donald W. Smith Jr., P.E. Consulting Engineer

Boring Identification: B-4

Project: Ansonia H.S. - Proposed Maintenance Garage

Sheet: 1 of 1

Location: 20 Pulaski Highway, Ansonia, CT

Checked By: BTN

Project Number: 9586-000

Drilling Company: Seaboard Drilling, Inc.

Boring Location: Proposed north building corner.

Foreman: Dale

Ground Surface Elevation: 385.9 feet

Datum: Note 1

GeoInsight Engineer/Geologist: AHF

Date Started: 1/16/20

Date Completed: 1/16/20

DRILLING METHOD	SAMPLER	GROUNDWATER MEASUREMENTS			
Vehicle: ATV	Type: 2" SS (Auto)	Date	Depth (ft)	Reference	Stabilization
Model: Diedrich D-50	Hammer (lb): 140	01/16/2020	Not Encountered	NA	NA
Method: Hollow Stem Auger	Fall (in): 30				

DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE
	#	Pen/Rec (in)	Depth (ft)	Blows/6"				
0	S1A	2/2	0-0.2	1	S1A: Very loose, dark brown, fine to medium SAND, little organic Silt and fine Roots, damp.	TOPSOIL		
1	S1B	22/5	0.2-2	1				
				1	S1B: Very loose, light brown, SILT, some fine Sand, trace fine Roots, damp.	NATIVE SUBSOIL		
				1				
2	S2	24/20	2-4	4	S2: Loose, light brown, fine to medium SAND, little Gravel, trace Silt, damp.	NATIVE TILL DEPOSIT		
3				3				
				7				
				14				
4	S3	24/19	4-6	28	S3: Medium dense, light brown and gray, fine to medium SAND, some Gravel, trace Silt, damp.	NATIVE TILL DEPOSIT		
				13				
5				13				
				14				
6	S4	24/24	6-8	18	S4: Dense, gray, highly weathered MICA SCHIST.	HIGHLY WEATHERED BEDROCK ^{NOTE 2}		
7				20				
				20				
				17				
8	S5	24/20	8-10	22	S5: Very dense, gray, highly weathered MICA SCHIST.	HIGHLY WEATHERED BEDROCK ^{NOTE 2}		
9				24				
				27				
				35				
10	S6	7/5	10-10.6	97	S6: Very dense, gray, highly weathered MICA SCHIST.			
11				50/1"				
					Boring terminated at 10.6 feet upon split spoon refusal.			
12								
13								
14								
15								
16								
17								
18								
19								
20								

GRANULAR SOILS		COHESIVE SOILS		NOTES
Blows/ft.	Density	Blows/ft.	Consistency	
0-4	V. LOOSE	<2	V. SOFT	
5-10	LOOSE	2-4	SOFT	
11-30	M. DENSE	4-8	M. STIFF	
31-50	DENSE	8-15	STIFF	
>50	V. DENSE	15-30	V. STIFF	
		>30	HARD	



GeoInsight
Environmental Strategy & Engineering

SOIL BORING LOG

Client: Donald W. Smith Jr., P.E. Consulting Engineer

Boring Identification: B-5

Project: Ansonia H.S. - Proposed Maintenance Garage

Sheet: 1 of 1

Location: 20 Pulaski Highway, Ansonia, CT

Checked By: BTN

Project Number: 9586-000

Drilling Company: Seaboard Drilling, Inc.

Boring Location: Proposed stormwater management area.

Foreman: Dale

Ground Surface Elevation: 381.5 feet

Datum: Note 1

GeoInsight Engineer/Geologist: AHF

Date Started: 1/16/20

Date Completed: 1/16/20

DRILLING METHOD	SAMPLER	GROUNDWATER MEASUREMENTS			
Vehicle: ATV	Type: 2" SS (Auto)	Date	Depth (ft)	Reference	Stabilization
Model: Diedrich D-50	Hammer (lb): 140	01/16/2020	Not Encountered	NA	NA
Method: Hollow Stem Auger	Fall (in): 30				

DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE
	#	Pen/Rec (in)	Depth (ft)	Blows/6"				
0	S1A	4/4	0-0.3	2	S1A: Very loose, dark brown, fine to medium SAND, little organic Silt and fine Roots, damp.	TOPSOIL		
1	S1B	20/8	0.3-2	1				
				2	S1B: Very loose, light brown, SILT, little fine Sand, trace Gravel, damp.	NATIVE SUBSOIL		
				1				
2	S2	24/16	2-4	4	S2: Medium dense, gray, highly weathered MICA SCHIST.	HIGHLY WEATHERED BEDROCK ^{NOTE 2}		
3				5				
				6				
				6				
4	S3	24/19	4-6	9	S3: Very dense, gray, highly weathered MICA SCHIST.			
				32				
5				32				
				27				
6	S4	24/24	6-8	14	S4: Medium dense, gray, highly weathered MICA SCHIST.			
				13				
7				16				
				17				
8	S5	24/20	8-9.3	21	S5: Very dense, gray, highly weathered MICA SCHIST.			
				35				
9				50/4"				
10					Boring terminated at 9.3 feet upon split spoon refusal.			
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

GRANULAR SOILS		COHESIVE SOILS		NOTES
Blows/ft.	Density	Blows/ft.	Consistency	
0-4	V. LOOSE	<2	V. SOFT	
5-10	LOOSE	2-4	SOFT	
11-30	M. DENSE	4-8	M. STIFF	
31-50	DENSE	8-15	STIFF	
>50	V. DENSE	15-30	V. STIFF	
		>30	HARD	

1. Datum based an Assumed Datum as shown on a plan titled Grading, Utilities & Erosion Control dated January 3, 2020 and prepared by Donald W. Smith Jr., P.E. Consulting Engineer.
 2. The gradation of the Highly Weathered Bedrock generally ranged from fine to medium SAND, some Gravel, some Silt to fine SAND and SILT, little Gravel.



GeoInsight
Environmental Strategy & Engineering

SOIL BORING LOG

Client: Donald W. Smith Jr., P.E. Consulting Engineer

Boring Identification: B-6

Project: Ansonia H.S. - Proposed Maintenance Garage

Sheet: 1 of 1

Location: 20 Pulaski Highway, Ansonia, CT

Checked By: BTN

Project Number: 9586-000

Drilling Company: Seaboard Drilling, Inc.

Boring Location: Proposed stormwater management area.

Foreman: Dale

Ground Surface Elevation: 381.5 feet

Datum: Note 1

GeoInsight Engineer/Geologist: AHF

Date Started: 1/16/20

Date Completed: 1/16/20

DRILLING METHOD	SAMPLER	GROUNDWATER MEASUREMENTS			
Vehicle: ATV	Type: 2" SS (Auto)	Date	Depth (ft)	Reference	Stabilization
Model: Diedrich D-50	Hammer (lb): 140	01/16/2020	Not Encountered	NA	NA
Method: Hollow Stem Auger	Fall (in): 30				

DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE
	#	Pen/Rec (in)	Depth (ft)	Blows/6"				
0	S1A	6/6	0-0.5	1	S1A: Very loose, dark brown, fine to medium SAND, little organic Silt and fine Roots, damp.	TOPSOIL		
1	S1B	18/18	0.5-2	1	S1B: Very loose, red brown, SILT, some fine Sand, trace fine Roots, damp.	NATIVE SUBSOIL		
				2				
2	S2A	6/6	2-2.5	4	S2A: Medium dense, light brown, SILT and fine SAND, little Gravel, damp.	HIGHLY WEATHERED BEDROCK ^{NOTE 2}		
	S2B	18/14	2.5-4	6				
3				5	S2B: Loose, gray, highly weathered MICA SCHIST.			
				5				
4	S3	24/19	4-6	13	S3: Very dense, gray, highly weathered MICA SCHIST.			
				29				
5				32	S4: Medium dense, gray, highly weathered MICA SCHIST.			
				20				
6	S4	24/18	6-8	12	S5: Very dense, gray, highly weathered MICA SCHIST.			
				10				
7				15	Boring terminated at 9.9 feet upon split spoon refusal.			
				15				
8	S5	23/20	8-9.9	15				
				25				
9				29				
				50/5"				
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

GRANULAR SOILS		COHESIVE SOILS		NOTES
Blows/ft.	Density	Blows/ft.	Consistency	
0-4	V. LOOSE	<2	V. SOFT	1. Datum based an Assumed Datum as shown on a plan titled Grading, Utilities & Erosion Control dated January 3, 2020 and prepared by Donald W. Smith Jr., P.E. Consulting Engineer. 2. The gradation of the Highly Weathered Bedrock generally ranged from fine to medium SAND, some Gravel, some Silt to fine SAND and SILT, little Gravel.
5-10	LOOSE	2-4	SOFT	
11-30	M. DENSE	4-8	M. STIFF	
31-50	DENSE	8-15	STIFF	
>50	V. DENSE	15-30	V. STIFF	
		>30	HARD	

SECTION 02240

PREPARATION OF SUBGRADE/FINE GRADE

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, and other Division 1 Specification Sections, apply to this Section.

1.2 DESCRIPTION OF THE WORK

- A. This work shall consist of the preparation of the top surface of the roadbed, after all grading has been substantially completed and all pipes/conduits laid, to accommodate the placement of the pavement structure and gutters in accordance with these specifications and in conformity with the lines, grades and typical cross-sections as shown on the Contract Drawings.

PART 2 - MATERIALS (NOT APPLICABLE)

PART 3 – EXECUTION

3.1 PREPARATION OF SUBGRADE

- A. All soft and yielding material, and other portions of the subgrade which will not compact readily when rolled, vibrated or tamped, shall be removed and replaced with suitable material. The surface shall be compacted uniformly with a minimum of four (4) complete coverages using an approved power roller having a minimum compression of 300 pounds per inch of width of tread on the rear wheel, and weighing not less than 10 tons, or with an equivalent vibratory roller or compactor.
- B. When more than one compacting unit is used, the unit exerting the greatest compactive effort shall be used to make the initial compaction. Any portion of the subgrade, which is not accessible to a roller or other compacting unit, shall be compacted thoroughly with hand tampers or with approved mechanical vibrators.
- C. The Contractor shall notify the local authority for inspection of the subbase in public streets prior to placement of the base course.

3.2 FINE GRADING

- A. After compaction, the top surface of the subgrade shall be fine graded so that it shall not extend above, nor more than ½ inch below, true grade and surface at any location. The subgrade shall not be muddy or otherwise unsatisfactory when pavement/base/subbase is placed upon it. If the fine grade of the subgrade becomes rutted or displaced due to any cause whatsoever, the Contractor shall regrade same at their own expense.

3.3 PROTECTION OF SUBGRADE

- A. The Contractor shall protect the subgrade from damage by exercising such precautions, as the Owner's representative may deem necessary. At all times, the subgrade surface shall be kept in such condition that it will drain readily and correctly. The subgrade shall be checked and approved before any pavement structure is placed thereon.

END OF SECTION 02240

SECTION 02270
EROSION AND SEDIMENTATION CONTROL

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, and other Division 1 Specification Sections, apply to this Section.

1.2 DESCRIPTION OF WORK

- A. Providing all temporary erosion control measures shown on the Drawings and required by the Owner's representative during the life of the Construction Contract to control soil erosion and water pollution.
- B. The installation and maintenance of silt fence, hay bales, temporary diversion swales, temporary sedimentation traps and basins, construction entrances, fiber mats, catch basin filters, straw, netting, gravel, trenches, mulches, grasses, slope drains and other approved erosion control devices or methods.
- C. Erosion control shall conform to the 2002 Connecticut Soil Erosion and Sedimentation Control Guidelines.

1.3 RELATED SECTIONS

- A. Sections, which directly relate to the work of this Section, include:
 - 1. Section 02060 - Site Preparation and Demolition
 - 2. Section 02200 - Earthwork
 - 3. Section 02900 - Landscaping

1.4 REFERENCES

- A. 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, May 2002.

1.5 COORDINATION WITH PERMANENT EROSION CONTROL PROVISIONS

- A. The temporary control provisions shall be coordinated with the permanent erosion control features to the extent practical to ensure economical, effective and continuous erosion control throughout the construction and post-construction period.

1.6 LAWS AND REGULATIONS

- A. The DEP General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (General Permit) and all other local, state and federal requirements.

1.7 PRIOR TO CONSTRUCTION

- A. Prior to the start of the construction, the Contractor shall submit to the Owner's representative their schedule for the construction of required temporary and permanent erosion and sedimentation control measures, clearing and grubbing, grading, construction, and paving. No work shall be started until erosion control schedules and methods of operations have been accepted by the Owner's representative.

1.8 CONSTRUCTION OPERATIONS

- A. When it becomes necessary, the Owner's representative will inform the Contractor of construction procedures and operations that jeopardize erosion control provisions. If these construction procedures and operations are not corrected promptly, the Owner's representative may suspend the performance of any or all construction until corrections have been made, and such suspension shall not be the basis of any claim by the Contractor for additional compensation from the Owner for an extension of time to complete the Work.

1.9 CONSTRUCTION REQUIREMENTS—TEMPORARY SEDIMENT CONTROL

- A. The Owner's representative has the authority to order immediate, additional, temporary control measures to prevent contamination of adjacent streams or other watercourses, or other areas of water impoundment and damage by erosion. These additional measures may be ordered based upon the visual observation of the Owner's representative .
- B. The Contractor shall construct all permanent erosion and sediment control features at the earliest practical time as outlined in the accepted schedule. Temporary erosion and sediment control measures shall be used to correct conditions that develop during construction, which were unforeseen, but are needed prior to installation of permanent control features, or that are needed temporarily to control erosion or sedimentation which develops during construction operations.
- C. Where erosion is likely to be a problem, clearing and grubbing operations shall be scheduled and performed so that grading operations and permanent erosion and sediment control features can follow immediately thereafter, if conditions permit; otherwise, temporary control measures will be required between successive construction stages.
- D. Failure by the Contractor to control erosion, pollution, and siltation shall be cause for the Owner's representative to employ outside assistance to provide the necessary corrective measures. The cost of such assistance, including engineering costs, will be charged to the Contractor and appropriate deductions made to the Contractor's monthly progress payment request.
- E. The Contractor shall periodically remove sediment from erosion control facilities. The accumulated sediment shall not be allowed to rise above the mid height of the erosion control facilities. The Contractor shall modify and improve erosion control facilities and replace deteriorated hay bales and other devices as required by the Owner's representative.

- F. Temporary and permanent erosion and sedimentation control measures are shown on the Drawings. The Contractor shall strictly adhere to the proposed measures. Additionally, temporary measures shall be constructed to accommodate field conditions that develop during construction.

1.10 MAINTENANCE OF EROSION CONTROL MEASURES

- A. The Contractor shall check the condition of erosion control devices daily and maintain them in good operating condition. Hay bales shall be replaced when deteriorated, and when required by the Owner's representative.
- B. The Contractor shall inspect the condition of diversion swales, biofiltration swales, sediment traps, detention basins and other erosion and sedimentation control devices after each storm event >0.5 inches. Repairs shall be made as necessary and as required by the Owner's representative.
- C. Accumulated sediment trapped by erosion and sedimentation control devices shall be removed as required by the SWPCP.
- D. Temporary soil erosion and sedimentation control devices shall be removed and adjacent areas outside the limits of grading restored upon completion of the work, or when required by the Owner's representative.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Seed for quick growing grasses, wheat, rye or oats shall be selected based on site and seasonal conditions from Figure TS-2 of the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, May 2002.
- B. Erosion Control Blanket/Fabric Netting shall be:
- Curlex blankets, as manufactured by American Excelsior Company, or
 - Polyjute Style 465 GT, as manufactured by Synthetic Industries, or
 - Tensar Erosion Mat, as manufactured by the Tensar Corporation, or approved equivalent.
- C. Hay bale for sediment traps, consisting of hay bales banded with wire or nylon tape (minimum two bands for bale), shall be approximately two-feet, six-inches in length.
- D. Stakes for hay bales shall be standard 1/2-inch x 3-foot reinforcing steel rods, steel pickets, 1 inch x 1 inch x 3-foot wood stakes or approved equivalent.
- E. Silt fence fabric shall be Mirafi 100X, Geotex 915SC, Contech C200, or approved equivalent.

- F. Filter fabric at a construction entrance shall Mirafi 600X, Geotex 200ST, Contech C-60NW, or approved equal.
- G. Catch basin filters shall be Siltsack by ACF Environmental, Dandy Sack by Dandy Products, Silt Mat by Kristar, or approved equal.

PART 3—EXECUTION

3.1 EROSION CONTROL - HAY BALES

- A. Hay bales shall be installed in accordance with the details indicated on the drawings and at the following locations, as required by the Owner's representative and as shown on the Drawings:
 - 1. Toe of slope of embankment construction to filter all runoff flowing to off-site discharges.
 - 2. Toe of temporary earthwork stockpile slopes.
 - 3. Across a construction ditch prior to entry into drainage system or waterway.
 - 4. Each side of completed drainage inlets.
 - 5. Dewatering Pumping Settling Basins.
 - 6. Other locations shown on the Contract Drawings or designated by the Owner's representative.
- B. Tightly abut hay bales to form a continuous barrier. Secure bales in place with two stakes per bale. The bales shall be trenched 4 inches into the ground. Soil shall be placed on the upslope side of the bales. Deteriorated, destroyed or rotted bales shall be replaced immediately. Sediment shall be removed and disposed of periodically from behind the hay bales. The accumulated sediment shall not be allowed to rise above the mid height of the bale. All sediment, hay bales and appurtenances shall be removed and disposed of at the completion of the Contract unless directed otherwise by the Owner's representative.

3.2 TEMPORARY EROSION CONTROL MATS

- A. Erosion control mats shall be installed in accordance with the manufacturer's recommendations.
- B. All areas shall be smooth graded and compacted. Remove all rocks, dirt clods, vegetation and other obstructions that may cause damage to the mats.
- C. Unroll mats parallel to the direction of water flow and lay flat against the ground. Overlap roll ends 1-2 feet with upslope mat on the top to prevent uplift of mat end by water flow. Overlay adjacent edges of mat by six inches. Extend mat 2-3 feet above the crest of steep slopes and anchor by excavating a 6-inch deep trench, and secure end of mat in trench, backfill and compact. Secure mat to the ground using staples or pins furnished by manufacturer of mat.

3.3 SILT FENCE

- A. Silt fence shall be installed as shown on the Drawings.
- B. Supporting posts shall be spaced a maximum of 5 feet on center, and driven at least one foot into the ground. Posts shall be 1-1/2-inch square or heavier wood posts, or standard steel posts.
- C. Fabric shall be anchored in a 6-inch deep trench dug on the upslope side of the posts. The trench shall be at least 6 inches wide. The fabric shall be laid in the trench, backfilled and compacted.
- D. Fabric rolls shall be spliced at posts. The fabric shall be overlapped 6 inches, folded over and securely fastened to posts.
- E. Silt fences shall be inspected immediately after each storm event and at least daily during prolonged rainfall >0.5 inches.

END OF SECTION 02270

SECTION 02400
STORM DRAINAGE

1 PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Storm Drainage Structures
- B. Storm Drainage Pipe

1.2 RELATED SECTIONS

- A. Earthwork Section 02200

2 PART 2 - PRODUCTS

2.1 PIPE

- A. Polyvinyl chloride (PVC) pipe shall conform to ASTM 3034, SDR 35, with polyurethane gasket.
- B. Solid and perforated roof and foundation drain pipe shall conform to ASTM D2729 or ASTM F810 with bell and spigot joints.
- C. Reinforced concrete pipe shall conform to the requirements of AASHTO-M-170, Class IV Pipe. All pipe shall be of the bell and spigot type with rubber or plastic gaskets.
- D. Cast Iron pipe shall be bell and spigot type, centrifugally cast with rubber compression joints conforming to ASTM A-74.
- E. High Density Polyethylene Pipe (HDPP) shall be corrugated exterior/smooth interior pipe conforming to ASTM F894, pipe joint shall conform to ASTM D3212 and gasket shall conform to ASTM F477, Hancor "sanitite" or approved equal.

2.2 PRECAST CONCRETE CATCH BASINS AND DROP INLETS

- A. Precast reinforced concrete catch basins and drop inlets shall conform to ASTM C478 and as shown on the drawings.

2.3 CASTINGS

- A. All new iron castings shall conform to the requirements of AASHTO designation M105, class 30 for grates and class 25 for frames.

- B. Iron castings shall be painted with one shop coat of a suitable bituminous paint which shall be tough and tenacious when cold and without tackiness or any tendency to scale off.
- C. The type of iron castings to be used for the various structures shall be as indicated on the drawings.
 - 1. Manhole frame and rim shall conform to City of Ansonia standards.
 - 2. Catch basin grates shall conform to CONNDOT standards.

2.4 MANHOLE STEP

- A. Steps for manholes shall be the drop-front extruded aluminum type with 10 inch wide stepping surface and in conformance with ASTM C478. Placement into precast walls shall be by a proven method as recommended by the supplier of the precast manhole sections. Details of the steps and method of placement shall be submitted for approval.

2.5 CLAY SEWER BRICKS

- A. Clay sewer brick shall conform to the requirements of AASHTO Designation M 91, Grade SM, with the following exceptions:
 - 1. The size of brick furnished shall be 8" x 3-5/8" x 2-1/4" nominal dimensions.
 - 2. The average of the absorption of 5 representative samples shall not exceed 15% and the individual absorption of any one sample shall not exceed 17-1/2%. The average compressive strength of 5 representative samples shall not be less than 3,000 pounds per square inch and the compressive strength if any one sample shall not be less than 2,500 pounds per square inch.
- B. Clay sewer brick shall be used only for obtaining proposed elevation for frame and grate.

2.6 CEMENT MORTAR

- A. Mortar shall be composed of one (1) part of Portland cement and two (2) parts of sand by volume with sufficient water to form a workable mixture. Cement, sand and water shall conform to the applicable provisions of the CONNDOT Standard Specifications, M.02.

2.7 MASONRY CONCRETE

- A. Masonry concrete units shall conform to ASTM C-139.

3 PART 3 - EXECUTION

3.1 STORM DRAINAGE STRUCTURES

- A. Structures of various types and depths shall be built to the line and grades, dimensions and design shown on the plans and as directed with the necessary frames, gratings, covers, aluminum steps, etc., and in accordance with these Specifications after verification of inverts of utilities to remain.
- B. Connections will be carefully made to all existing and proposed lines to the grades and elevations shown on the drawings.
- C. Suitable materials obtained from the excavation or from borrow shall be placed between the outside of the structure and the limits of the excavation, uniformly distributed in successive layers not exceeding 6 inches in depth and thoroughly compacted by tamping with mechanical rammers.

When required, the backfill material shall be moistened during the compacting. Compaction with iron hand tampers having a tamping face not exceeding 25 square inches may be allowed, but only after permission has been given by the Owner's Representative.

- D. All materials removed in the excavation for catch basins, and remaining after the filling about the finished structure has been made shall be used wherever possible within the project or removed and satisfactorily disposed outside of the project limits without additional compensation.
- E. The embedded ends of the aluminum ladder steps shall be painted with zinc chromate or bitumastic, and allowed to completely dry before they are installed. Installation shall be as shown on the plans.
- F. Frame castings for structures shall be set in full mortar beds true to the lines and grades as directed.
- G. Where directed, the castings shall be temporarily set at such grades as to provide drainage during the construction.

3.2 PIPE LAYING

- A. The drawings are diagrammatic only and are intended to indicate the extent but not all details of the piping which shall be supplied.
- B. The Contractor shall field verify all existing inverts and inform the Owner's Representative of any discrepancies. Record these inverts on Record Drawings.
- C. The trench for the pipe shall be excavated to the required line and grade and be of sufficient width to permit thorough tamping of the fill material under the haunches and around the pipe. Soft or unsuitable material encountered

below the normal bedding line of the pipe shall be removed as directed, replaced with selected material, gravel or crushed stone and thoroughly compacted.

The bottom of the trench shall be shaped to conform to the curvature of the pipe. This bed shall also be excavated to accommodate the bells of pipes.

- D. The pipe shall be laid true to the specified lines and grades where shown on the Plans and as directed. The bell end shall be toward rising grade and each section of pipe shall have firm bearing throughout its length. Material placed around and under the pipe shall be free of stones larger than 3 inches in diameter.
- E. Backfill for pipes shall conform to requirements found in the excavation section of these specifications and shall be placed between the pipe and the walls of the trench in layers not exceeding 6 inches in depth and thoroughly compacted. Each layer, if dry, shall be moistened and then compacted by rolling or by tamping with mechanical rammers. Compaction with iron hand tampers having a tamping face not exceeding 25 square inches in area may be allowed only after permission has been given by the Owner's Representative. Special care shall be taken to thoroughly compact the fill under the haunches of the pipe. This method of filling and compacting shall be continued until the material is level with the top of the pipe. The remainder of the filling shall consist of material placed in successive layers not more than 6 inches in depth. Each layer shall be thoroughly compacted to 90% dry density in accordance with ASTM D1557-70.
- F. Any pipe showing settlement after laying or which is not in true alignment or is otherwise unsatisfactory before final acceptance of the work shall be taken up and replaced or relaid by the Contractor without additional compensation.
- G. All foreign matter shall be removed from the interior each length of pipe prior to installation and ends shall be cleaned both inside and outside.
- H. Water shall not be allowed in trenches or excavations while pipe is being laid and care shall be taken to prevent the entrance of foreign matter into the pipe line. The ends of all piping shall be plugged watertight whenever work is not in active progress. Pipe lines shall be flushed clean upon completion of laying and jointing.
- I. The Contractor shall enter the drain structure carefully and in a manner approved by the Owner's Representative. The cavity to receive the new drain line shall be of a sufficient diameter to allow a bed of mortar to be placed for the new drain line and to allow the installation of mortar around the entire circumference of the pipe for the full depths of the structure, both inside and outside. Bricks, if necessary to properly close the cavity shall conform to Section M.04 of the Connecticut Standard Specifications.

3.3 MANHOLES

- A. Manholes shall be constructed at the locations shown on the plans.
- B. Manholes shall be constructed in accordance with the details shown on the plan and section 5.07 of the CONNDOT standard specifications.

END OF SECTION

SECTION 02500
PAVING AND SURFACING

1 PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Bituminous Concrete Pavement
- B. Bituminous Concrete Machine Formed Curb
- C. Bituminous Concrete Patching
- D. Painted Pavement Markings

2 PART 2 - PRODUCTS

2.1 BANK RUN GRAVEL

- A. Refer to excavation section

2.2 PROCESSED AGGREGATE

- A. Refer to excavation section

2.3 BITUMINOUS CONCRETE

- A. Bituminous concrete shall conform to the relevant provisions of Section M.04 of the CONNDOT Standard Specifications Form 816 and the following requirements:

Binder Course - Class 1
Surface Course - Class 2
Curbing - Class 3

2.4 PAVEMENT MARKINGS

- A. Traffic markings.
 - 1. Ready-mixed White, Yellow, Blue traffic paints shall conform to AASHTO Designation: M 248-74. Unless otherwise specified, the paint shall be Type II and shall be lead free.
 - 2. Paint marking materials shall be manufactured by Hercules, Inc., Wilmington, Delaware, Prismo Universal, Rockville, Maryland, Ferro Corporation, Jackson Mississippi, or approved equal and shall appear on the approved materials list of the State Department of Transportation. The name of the manufacture and the place of manufacture shall be clearly indicated on the containers.

2.5 PRIME COAT

- A. May be asphalt cement, MC liquid asphalt, RC liquid asphalt, RT liquid or emulsified asphalt conforming to requirements of CONNDOT Standard M.04.01D.

3 PART 3 - EXECUTION

3.1 GENERAL

- A. All paving, patching and curbing operations and materials shall be provided as per Section 4.06 of the CONNDOT Standard Specifications Form 816 and as approved by the Owner's Representative.

3.2 PREPARATION

- A. Do all necessary regrading to bring subgrades to the required grades and sections including compaction in accordance with Excavation Section.
- B. All soft and yielding materials and other portions of the subgrade which will not compact readily when rolled or tamped, shall be removed as directed and all loose rock or boulders found in the subgrade shall be removed or broken off to a depth of not less than twelve inches (12") below subgrade.
- C. All holes or depressions made by the removal of materials as described shall be filled with suitable material and the whole surface compacted uniformly with an approved vibratory compacting roller or tamped to not less than 90% of the ASTM compaction dry densities.
- D. Any portion of the subgrade which is not accessible to a vibratory compacting roller or tamper shall be compacted thoroughly with hand tampers weighing not less than fifty (50) pounds. The face of the tamper shall not exceed 100 square inches in area.
- E. In excavation, the ground shall not be plowed or disturbed below the surface of the subgrade except as specified herein.
- F. Refill, as required, compact all utility trenches. Spongy and otherwise unsuitable material shall be removed and replaced with suitable material when directed by Owner's Representative. Exceptionally hard spots shall be loosened and recompacted. Every precaution shall be taken to obtain a subgrade of uniform bearing capacity.
- G. At all times, the subgrade surface shall be kept in such a condition that it will drain readily. No material shall be deposited on the subgrade until the subgrade has been approved by Owner's Representative. In no case shall the base course be placed on a frozen or muddy subgrade. Storage or stockpiling of materials on subgrade will not be permitted.

3.3 GRAVEL BASE COURSE

- A. On the subgrade, place 12" of gravel or processed aggregate for areas designated to receive new gravel base course.
- B. The gravel shall be placed in 4 - 6" lifts and spread uniformly by means of approved spreaders, roadscappers or by other methods satisfactory to the Owner's Representative. Stones larger than 3" or one-half of the depth of the course shall be removed. Care shall be taken not to allow segregation of the remaining larger stones in the course; and if this becomes apparent, the material shall be separated and spread by means of rakes, forks or shovels.
- C. Fill any depressions that appear during or after the rolling with gravel and reroll until the surface is true and even. Compact inaccessible areas with a small mechanical or hand tamper.
- D. If the gravel does not contain a sufficient amount of moisture to insure its firm and adequate compaction and shaping, water shall be added in sufficient amount to obtain the desired result.
- E. Each lift of the base course under bituminous pavement and walkways shall be rolled with an approved vibratory roller or a self propelled mechanical roller, weighing not less than 10 tons or as approved by the Owner's Representative, to a level plane as required to obtain the designated finished grades and to attain not less than 95% of the specified ASTM maximum dry density at the optimum moisture content as established by Method D ASTM Standard D-1557-70 and verified in the field by ASTM Standard 1556-64.

3.4 BITUMINOUS PAVEMENT

- A. All bituminous roadway pavement shall be in two courses consisting of a surface course applied onto a binder course. Refer to the Project Plans for the thickness and class of each pavement course.
- B. Immediately before laying the plant mix binder and surface courses, the gravel base or foundation course shall be cleaned of loose or caked dirt, etc., and the surface shall show a uniform rough (granular) appearance. The courses shall be applied and rolled to a compacted thickness in accordance with the lines and dimensions in the drawings. All surfaces shall pitch to drain readily.
- C. The courses shall be thoroughly and uniformly compacted by use of power driven rollers, mechanically wetted and weighing not less than 10 tons or as approved by the Owner's Representative. Additional rolling by pneumatic tired roller shall be provided to finish all surface courses. The size and type of finish roller shall be as required and shall obtain the desired finishing product as determined by the Owner's Representative. Rolling shall proceed at uniform rate and continue until all roller marks, ridges, porous

spots and impressions have been eliminated; no further compression is possible; and the surface conforms with the specified lines and grades.

- D. Spreading by hand will be allowed in special patch areas (along curblines) provided that the material is immediately spread following delivery by means of hot shovels and hot rakes to uniform density and correct depth. If rolling is not practical, due to the proximity of curbstones or other structures, the material may be compacted and the surface irregularities adjusted by use of mechanical tapers, hand tamping irons and hot smoothing irons. Any mixture that becomes loose and broken, mixed with dirt, or is in any way defective shall be removed and replaced with fresh hot mixture which shall be compacted to conform with the surrounding areas.

3.5 MEETING EXISTING PAVEMENTS

- A. Where new pavements are to meeting existing pavements, the Contractor shall saw cut the existing pavements so that there will be a vertical butting surface between the old and new pavements. Sawcutting of existing pavements shall be along neat, straight and even lines, and shall be done in such a manner so as not to damage the adjacent pavement, which is to remain.
- B. The existing pavement shall be sawcut by an approved method for the full depth of the pavement prior to placement of any new pavement. The existing bituminous surface shall be trimmed to a neat true line with straight vertical edges free from irregularities, and the trimmed edges shall be treated with a light coating of asphaltic emulsion immediately prior to the installation of the new abutting bituminous concrete surface course to provide a bond between the old and new pavement. The new compacted pavement surface shall be finished flush with the adjacent pavement.

3.6 BITUMINOUS CONCRETE LIP CURB

A. General Requirements

- 1. Bituminous curbing shall be constructed by the use of an approved self-propelled extruding curb machine equipped with a material hopper, distributing screw and curb forming device capable of placing the bituminous mixture to the required lines, grades and proper curb cross-section. Prior to the placement of any curb, the Contractor shall submit a detail of the cross-section of the curb mold that he proposes to use to the Owner's representative for approval.

B. Surface Preparation

- 1. When curbing is to be placed on existing bituminous pavements, concrete pavements or newly laid bituminous pavements which have been in place more than twenty-four (24) hours, the surface on which the curb is to be placed shall be swept and cleaned, thoroughly dried, and immediately prior to placement of the curb, the surface to be occupied by the curb shall be given an application of tack coat material. Particular care shall be exercised to prevent spread of tack

coat material beyond the area to be occupied by the curb. Recently placed bituminous concrete pavement, which have been placed less than twenty-four (24) hours prior to placement of the curb need only be thoroughly swept and cleaned.

C Placing and Compaction

1. The hot bituminous mixture shall be placed in the hopper of the curb paver without segregation and extruded through the mold form to provide the proper compaction and surface texture.
 2. The curb paver shall be properly supported and weighted during operation along the edge of the pavement and shall be guided along string or chalk lines to maintain the proper alignment and level of the completed curb.
 3. Any portions of the completed curb, which are not satisfactorily compacted, or show signs of sagging, cracking, or distortion, or do not conform to the required lines, grades or cross-section for any reason, and which cannot be satisfactorily repaired during construction, shall be removed and replaced at no additional cost to the Owner.
- D. Joints: Bituminous curb construction shall be a continuous operation in one direction only, to eliminate frequent joints. When the placing of the curb is discontinued for a length of time that permits the mixture to become chilled, the curb shall be cut in a true vertical plane and the exposed end painted with a thin uniform coat of hot asphalt cement just prior to placing the fresh curb mixture against the previously constructed curb to insure a continuous bond.

3.7 PAVEMENT MARKINGS

- A. All surfaces to receive pavement markings shall be thoroughly cleaned prior to initiating line layout.
- B. Accurately locate lines in accordance with the Drawings and mark by snapping a chalked line.
- C. Traffic marking paint shall be applied at a rate of 100 square feet to 115 square feet per gallon with glass beads, if indicated on the plans, applied at a rate of six pounds per gallon of paint.
- D. Traffic marking paint shall be applied parallel to the roadway centerline or as shown on the plans with no unsightly deviations.
- E. After application, the paint shall be protected from crossing pedestrians or vehicles for a time at least equivalent to the drying time of the paint. Dimensions of the markings shall conform to the Contract Drawings and the latest edition of "Manual of Uniform Traffic Control Devices for Street and Highways."

- F. The markings shall not be applied unless the temperature is above 40 F and the pavement is thoroughly dry. Surface dry will not constitute thoroughly dry.
- G. Painted Pavement Markings shall be applied with an atomizing spray type striping machine. The equipment shall be compatible and suitable for the application of the type of paint being used and shall be approved by the Owner's Representative. Applied markings shall be clean-cut edges, true and smooth alignment and a uniform film thickness of 15 ± 1 mil.
- H. Legends such as arrows and words shall be applied with a suitable template to provide a clean and undistorted marking.

4 PART 4 - GUARANTEE AND ACCEPTANCE

- A. Painted lines shall be guaranteed for a period of one year from final acceptance, against cracking, peeling, checking, or other defect. The Contractor will repair, recoat or otherwise make satisfactory, any failed lines, at no cost to the Owner.

END OF SECTION

SECTION 02990
LANDSCAPE

1 PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Spread stockpiled topsoil and/or furnishing and spreading off-site topsoil.
- B. Finish grading.
- C. Seeding.

1.2 REFERENCES

- A. ANSI Z 260.1 - Nursery Stock, latest edition (American Association of Nurserymen, Inc.).

1.3 QUALITY ASSURANCE

- A. Subcontract landscaping work to be a firm specializing in such work unless contractor is fully experienced and qualified.
- B. Each seed bag or container shall display a label which identifies the contents as a true representation of the seed mix and percentages required by specification. No seed shall be applied to a site until the Owner's Representative has determined the mixture meets all requirements.
- C. All plants are to be tagged and other standard products sealed and delivered unbroken.
- D. Do not make substitutions without written approval. If specified landscape material is not available, obtain approval for substitution from the architect.

1.4 SUBMITTALS FOR APPROVALS

- A. Certified analysis and source of off-site topsoil, to be provided. Certification shall list soil additives required to be added to the topsoil, rates and type.
- B. Certifications and/or labels of proposed seed mixtures stating common and scientific names of grasses, percentages by weight, and percentages of purity and germination, certification of proposed sod grass composition.

1.5 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Protect all products from weather or other damaging or deteriorating conditions.
- B. Seed, sod, or plants which have been damaged or have deteriorated in transit or storage are not acceptable.
- C. Lay sod within 24 hours of stripping.

- D. Keep plants moist, fresh and protected against exposure to sun, wind, and freezing temperatures whether in the receiving yard, in transit, while being handled, or at the job site awaiting planting.
- E. Deliver trees and shrubs after preparations for planting have been completed and plant immediately.
- F. Planting Schedule: Prepare a proposed planting schedule. Schedule dates for each type of landscape work during normal seasons for such work.

Planting:

Seeding, sodding: April 1 - June 1 - August 15 - October 15
Deciduous material: March 1 - May 15 - October 15 - December 1
Evergreen material: March 1 - June 1 - August 15 - October 1

Correlate with specified maintenance periods to provide maintenance to date of acceptance. Once the schedule is accepted, revise dates only as approved in writing, after documentation of reasons for delays.

1.6 WARRANTY

- A. Provide a warranty for tree, shrub and ground cover plantings for minimum of one year including one continuous growing season. Commence warranty on date identified in the Certificate of Final Completion.
- B. Warranty: Include coverage of plants from death or unhealthy conditions.
- C. Replacements: Plants of same size and species as specified, planted in the next growing season, with a new warranty and an extended maintenance service commencing on date of replacement.
- D. Warranty lawns until final acceptance

1.7 MAINTENANCE SERVICE

- A. Maintenance services to be performed by Installer Include:
 - 1. Watering
 - 2. Regrading and replanting eroded areas
 - 3. Seeding or patching sparse or bare areas
 - 4. Mowing
- B. Maintain grass area immediately after placement until grass is accepted.

2 PART 2 - PRODUCTS

2.1 TOPSOIL (for planting soil mix, and as required for lawn work):

- A. Fertile, friable, medium textured sandy loam with no admixture of refuse or any natural or introduced materials toxic to plant growth and free from subsoil and stumps, roots, brush, stones, clay lumps or other extraneous matter over 1-1/2" in diameter. Sandy loam shall possess good filtration and permeability rates, and shall possess a mechanical analysis where:
 - 85% of sand size is 0.5 to 1.0 mm and
 - 95% of sand mix is between 0.5 and 2.0 mm and no more than 5% of mix is less than .05 mm
- B. Acidity range of approximately pH 5.5 to 7.5 when tested according to methods of testing of A.O.A.C. and organic content not less than 3% nor more than 20% as determined by wet combustion method (Chromic acid reduction). Topsoil may be amended to meet such requirements. Provide analysis prior to delivering topsoil to site, including recommended rates and types of soil additives to achieve desired mix.
- C. On site topsoil (stockpiled) shall be free of debris, roots and branches. It shall be made to conform to the requirements for sandy loam furnished from off-site as specified herein.

2.2 PEAT HUMUS

- A. Natural peat humus, free from excessive amounts of zinc, low in wood content, free from hard lumps and in a shredded or granular form; acidity range approximately 5.5 pH to 7.6 pH and organic matter not less than 85%, minimum water absorbing ability shall be 200% by weight on an over-dry basis.

2.3 GRAVEL BORROW

Refer to Excavation Section.

2.4 SEED

- A. General: Pure, live, fresh seed from commercial sources meeting and labeled in accordance with State and Federal laws, rules and regulations. All seed to have minimum germination rate of 85%.
1. New seeding mixture shall conform to the following grass types and percentages:

Type	Proportion by Weight
Perennial Ryegrass	45.0%
Kentucky Bluegrass	45.0%
Creeping Red Fescue	7.5%
Insert Materials	2.5%

2.5 SOIL ADDITIVES

- A. Limestone: Dolomitic limestone containing up to 50% magnesium carbonate in a dry, granular form. Granular treatment to be applied at a rate of 25lbs. per 1,000 square feet of turf area.
- B. Lawn Starter Fertilizer: Complete fertilizer in granular form, from commercial sources bearing manufacturer's analysis; 18-26-12 ratio of N-P-K applied at 2.5-5 lbs. per 1,000 square feet of new lawn according to manufacturer's direction.
- C. Post-emergent weed control for seeding: Apply "trimac," or approved equal in accordance with manufacturer's written instructions.
- D. Sand: Refer to Excavation Section.

2.6 MULCH

Clean, well aged shredded pine bark, free from weeds and other extraneous material.

2.7 WATER

- A. Clean, fresh potable water.

3 PART 3 - EXECUTION

3.1 LAWN ESTABLISHMENT

- A. Preparation of existing turf or disturbed areas for seeding or sodding. Spread agricultural limestone and entire area shall be harrowed, disced and otherwise thoroughly broken-up to 4-5" depth. Remove all large stone, roots, hard clods and other unsuitable or foreign materials encountered.
 - 1. Harrow discing shall be done twice, perpendicular to each direction. Clods shall be broken so that they are less than 4" in any dimension.
 - 2. Request inspection of the work by Owner's Representative prior to proceeding.
- B. Grading and spreading topsoil:
 - 1. Remove all debris and other inorganic materials on any prepared subgrades, and reshape and dress any damaged or eroded slopes, swales, and other areas. Scarify and loosen subgrade to a friable condition in any areas where compaction may have occurred. Topsoil shall not be placed until subgrade is in suitable condition and free of excessive moisture or frozen materials. Stockpiled and off-site topsoil shall be spread as required on all disturbed and bare areas. Fill all depressions in existing grades and reshape and finish grades to depth of topsoil required.

2. Area shall be progressively fine graded and machine or hand raked, with stockpiled and off-site topsoil added as required to correct depressions and other irregularities, to produce smooth and unbroken finished grades and the depth of topsoil required. Where additional topsoil is placed on existing topsoil disc harrow to mix to 4". Drawings show grading design and intent to achieve a uniform grade not less than 1.25% slope. Finish grades shall conform to lines, grades, sections, and shapes of lawn areas as required. Provide positive drainage. Provide smooth, uniform, rounded transitions at all changes and breaks in grade. Topsoil is to be consistent depth of 1/2" below adjacent pavement surfaces.
3. Starter fertilizer: All required materials shall be spread and distributed into the soil at rates and amounts specified herein.
4. After establishment of finish grade, entire area shall be rolled with 1 ton roller or equivalent.

C. Seeding:

1. Approved seed mixture shall be applied at a rate of 1.0 lbs. per 1,000 square feet by means of an approved spreader device.

D. Acceptance:

1. Lawns shall be given final acceptance when grass is well established, exhibits a vigorous growing condition, is devoid of bare spots greater than 1 sq. ft., and has been mown at least twice.
2. At any time within period before acceptance, the Contractor shall replace any turf which, for any reason other than vandalism, has died or is in a dying condition, or which has failed to flourish in such a manner or to such a degree that its usefulness or appearance has been impaired.
3. Visit site as necessary during the period before acceptance to maintain grass. The Owner will not maintain grass until final acceptance of lawn areas. Contractor shall not have any claim that materials have failed to flourish as a result of Owner's maintenance operations, or lack of maintenance, and shall abide by terms stated herein for guarantee and replacement of lawn.
4. Decision of Owner as to necessity to replace lawns or repair any defects on workmanship, or cause of any destruction or loss, impairment or failure to flourish, shall be conclusive and binding upon Contractor. Replacements shall be the same as specified. All replacements shall be planted as specified herein at Contractor's expense.
5. "Vandalism", as noted above, is intended to mean any acts, whether intentional or accidental, by other persons, which clearly result in damage, and which may reasonably be considered to be beyond the Contractor's reasonable control, as determined by the Owner's Representative.

END OF SECTION

SITE-CIVIL

All site/civil construction shall be in accordance with Drawings C1, C2, C3 & C4. Any revision to the Site Design shall be performed by the engineer of record. The contractor may, at his expense, have the site redesigned by a Connecticut-licensed Professional Engineer, however the layout, configuration, and materials of construction for site components including, but not limited to, stormwater management systems, curbing, drives and parking lots, signage and associated site amenities shall be in accordance with the plans approved by the Planning/Zoning Commission, the specifications and applicable building codes, and shall meet all applicable accessibility requirements. The contractor shall be responsible for securing all municipal approvals required as a result of a change in the approved Site Plan.

Utilities

Stormwater

Stormwater management and quality systems shall be designed and configured per the Connecticut Department of Energy & Environmental Protection (DEEP) 2004 Stormwater Quality Manual with October 2013 updates. Hydraulics, hydrology and stormwater facilities shall be designed per state requirements. Stormwater design shall be sufficient for permitting requirements through the City of Ansonia.

Electric

Underground electric service shall be sized and configured to meet building demands in coordination with the electrical engineer. Design of power supplies shall be completed in accordance with utility company regulations and applicable codes.

Miscellaneous Utilities

Coordinate with the D/B mechanical engineer to determine all other required exterior utilities. Miscellaneous utilities may include, but are not limited to stormwater, etc. All utility design shall be coordinated with applicable utility providers and City of Ansonia requirements.

ARCHITECTURAL/STRUCTURAL SYSTEMS

DESIGN CRITERIA

All structures and building systems will be designed in accordance with 2018 CT Building Code with the 2015 IBC and the 2018 CT Fire Safety Code (and all related referenced codes). The minimum design criteria as provided by the code, includes dead, live, and gravity loads, and wind and seismic loads. Dead loads consist of the weight of architectural, structural, mechanical and electrical systems. Live, wind and seismic loads are as required by the State of Connecticut building code. All building system designs shall be completed under the direction of and bear the seal of a Connecticut-licensed Architect or

Professional Engineer in compliance with State Law and the Building Codes.

FOUNDATIONS

A geotechnical report has been completed and attached to this project manual to be used for the foundation system, excavation and backfilling requirements. The geotechnical engineer's recommendations shall be incorporated into the design of the building foundations.

Concrete

The reinforced slab on grade shall be designed to support the vehicles indicated in the construction documents and in accordance with the Building Code. The slab shall slope at a 1% pitch from the east side (rear) of the bays to the west side (overhead doors) to drain out to the pavement area.

LATERAL LOAD RESISTING SYSTEM

Lateral load resistance to horizontal wind and seismic loads will design by the pre-engineered structural engineer of record. In order to transfer horizontal (wind and seismic) loads to the lateral load resisting system, horizontal diaphragms will be required. The Design/Build General Contractor is responsible to size all structural members, connections, spacing, associated with the design and construction of the superstructure.

Pre-Engineered Steel Structure:

Provide a complete, integrated set of metal building system manufacturer's standard mutually dependent components and assemblies that form a metal building system capable of withstanding structural and other loads, thermally induced movement, and exposure to weather without failure or infiltration of water into building interior. The building shall be as dimensioned on the site plans, and shall be designed in accordance with the plans and elevations provided. Include primary and secondary framing, metal roof panels, metal wall panels and accessories complying with requirements indicated. Rigid Clear Span, solid-member, structural-framing system and the facility can be provided with or without interior columns on the grid lines indicated.

Primary Framing: Manufacturer's standard primary-framing system, designed to withstand required loads and specified requirements. Primary framing includes transverse; rafters, rake; sidewall, intermediate, end-wall, and corner columns; and wind bracing.

General: Provide frames with attachment plates, bearing plates, and splice members. Factory drill for field-bolted assembly. Provide frame span and spacing indicated. Slight variations in span and spacing may be acceptable if necessary to comply with manufacturer's standard, as approved by Architect. Rigid Clear-Span Frames: I-shaped frame sections fabricated from shop-welded, built-up steel plates or structural-steel shapes. Exterior Columns: Uniform depth or tapered. Rafter: Uniform depth or tapered.

End-Wall Framing: Manufacturer's standard, for buildings not required to be expandable,

consisting of load-bearing end-wall and corner columns and rafters. Secondary Frame Type: Manufacturer's standard purlins, girts, eave struts, base members, flange bracing, gable angles, clips and miscellaneous structural parts. Siding: Provide a 6" exposure vertical metal siding compatible with the substructure and insulation system selected. Provide metal building systems capable of withstanding the effects of gravity loads. Engineer metal building systems according to procedures in MBMA's "Metal Building Systems Manual." The structural design shall conform to the requirements of the Connecticut State Building Code and latest edition of referenced standards. Roof Snow Loads: Include vertical loads induced by the weight of snow, minimum load of 40 psf. Allow for unbalanced and drift loads. Comply with requirements of the Connecticut State Building Code. Wind Loads: Include all roof and wall loads required by the Connecticut State Building Code.

Eave Height: As indicated in the drawings to accommodate the overhead doors at the eave end. Bay Spacing and roof slope in accordance with the drawings and as required to deliver an interior clear height to the underside of the ridge structural elements as indicated. Roof System: Manufacturer's standard standing-seam, vertical-rib, metal roof panels. Exterior Wall System: Manufacturer's standard concealed-fastener, flush-profile, metal wall panels. Liner Panels: Flush profile.

Thermal Movements: Provide metal panel systems that allow for thermal movements resulting from the following maximum change (range) in ambient and surface temperatures by preventing buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections and other detrimental effects. Base engineering calculation on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.

METAL ROOF PANELS

- A. Standing-Seam, Vertical-Rib, Metal Roof Panels : Formed with vertical ribs at panel edges and flat pan between ribs; designed for sequential installation by mechanically attaching panels to supports using concealed clips located under one side of panels and engaging opposite edge of adjacent panels.
 - 1. Material: Zinc-coated (galvanized) or aluminum-zinc alloy-coated steel sheet, 0.030-inch (0.76-mm) nominal uncoated steel thickness. Prepainted by the coil-coating process to comply with ASTM A 755/A 755M.
 - a. Exterior Finish: Two-coat fluoropolymer.
 - b. Color: As selected by Architect from manufacturer's full range.
 - 2. Clips: One-piece fixed to accommodate thermal movement.
 - 3. Joint Type: Panels snapped together.
 - 4. Panel Coverage: 16 inches (406 mm).
 - 5. Panel Height: 2 inches (51 mm).

B. Finishes:

1. Exposed Coil-Coated Finish:
 - a. Two-Coat Fluoropolymer: AAMA 621. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
2. Concealed Finish: Apply pretreatment and manufacturer's standard white or light-colored acrylic or polyester backer finish, consisting of prime coat and wash coat with a minimum total dry film thickness of 0.5 mil (0.013 mm).

METAL WALL PANELS

- A. Concealed-Fastener, Flush-Profile, Metal Wall Panels : Formed with vertical panel edges and flush surface; with flush joint between panels; with 1-inch- (25-mm-) wide flange for attaching interior finish; designed to be installed by lapping and interconnecting side edges of adjacent panels and mechanically attaching through panel to supports using concealed fasteners and factory-applied sealant in side laps.
 3. Material: Zinc-coated (galvanized) or aluminum-zinc alloy-coated steel sheet, 0.030-inch (0.76-mm) nominal uncoated steel thickness. Prepainted by the coil-coating process to comply with ASTM A 755/A 755M.
 - a. Exterior Finish: Fluoropolymer.
 - b. Color: As selected by Architect from manufacturer's full range.
 4. Panel Coverage: 16 inches (406 mm).
 5. Panel Height: 3 inches (76 mm).
- C. Finishes:

1. Exposed Coil-Coated Finish:
 - a. Two-Coat Fluoropolymer: AAMA 621. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
2. Concealed Finish: Apply pretreatment and manufacturer's standard white or light-colored acrylic or polyester backer finish, consisting of prime coat and wash coat with a minimum total dry film thickness of 0.5 mil (0.013 mm).

Blocking

All framing lumber in contact with the concrete foundation system must be preservative treated lumber (wood sills, soles, plates, furring, and sleepers that are less than 24 inches from the

ground or furring and nailers that are set in or in contact with concrete or masonry). All preservative treated lumber must be No.1 grade or greater. All preservative treated products must meet the American Wood Preservers Association Standards. All framing lumber and boards must be air or kiln dry lumber. All framing lumber or boards must have maximum moisture content of 19%. All rough hardware shall be of the type, size, and spacing necessary for the project requirements. All fasteners embedded in or in contact with preservative treated wood, concrete, or masonry products shall be zinc-coated. All wood blocking shall be properly sized and shaped at locations requiring installation or attached to fixtures, kitchen cabinets, and equipment.

Thermal and Moisture Protection

Damproofing

Provide Bituminous Damproofing to concrete foundation walls. Prime surfaces at a rate of 1 gallon per 100 square feet. Cold Bitumen by spray or trowel.

Waterproofing

Provide sheet rolled Stego (or equivalent) wrap under the entire slab on grade. Tape and seal all penetrations.

Rigid Insulation

Provide Polystyrene Insulation at perimeter foundation wall and against concrete slabs. Provide a minimum thermal resistance rating of 5.4R per inch and to meet the building code and a 15 psi of compressive strength. Make sure all edges are square. Adhere all boards to maximizing bonding contact. Stagger all joints and butt edges tight to each other. Tape all joints with compatible material.

Batt and Blanket Insulation

Provide Batt and Blanket insulation at all exterior walls, ceilings and for perimeter window and door shims spaces and crevices in the exterior wall and roof. The superstructure must meet the current International Energy Efficiency Code. Exposed wall and roof batt and blanket insulation to be reinforced vinyl faced. A thermal break is required between the roof decking/roofing and the steel superstructure. All thermal resistant ratings must meet all applicable building energy codes. Closed Cell blown-in insulation can be used if fully encapsulated behind sheetrock and/or other applicable materials. Vapor-Retarder Tape: Pressure-sensitive tape of type recommended by vapor-retarder manufacturer for sealing joints and penetrations in vapor retarder.

Gutters and Downspouts

Provide extruded aluminum gutters, .050" minimum thickness, baked enamel finish, color: selected from manufacturer's standards. Downspouts to be 6" in diameter to discharge to connection with underground PVC drainage piping to storm water system. Locations to be determined in the field by the Owner. All straps and connectors to match adjacent material.

Rail-Type, Seam-Mounted Snow Guards:

Snow guard rails fabricated from metal pipes, bars, or extrusions, anchored to brackets and equipped with two rails. Brackets and Baseplate: aluminum; mill finished. Bars: Type 304

stainless steel; mill finish. Seam clamps: ASTM B221 aluminum extrusion or ASTM B85/B85M aluminum casting with stainless steel set screws incorporating round nonpenetrating point; designed for use with applicable roofing system to which clamp is attached.

Doors and Windows

Exterior Man Doors

All single leaf, man doors shall be 3’-0” x 7’-0”. All steel doors to be sheet steel not less than 16 gage in thickness. All exterior doors must be sheet steel hot-dipped zinc coated to a minimum .60 oz/sq.ft. Exterior (heated/unheated spaces) frames shall not less than 14 gage in thickness and hot-dipped zinc coated to a minimum .60 oz/sq.ft.

Door Hardware

All door hardware to meet applicable fire ratings and accessibility requirements. All locksets to be provided and installed by Contractor. Hardware finishes to be selected by the Owner. All door hardware to be commercial heavy duty grade.

Door No.	Automatic Door Closer	Lever Handled Lockset (Type)	Kick/Armor Plate	Wall/Door Stop/Overhead Stop	Door Viewer	Weather-stripping/ Aluminum threshold
101Ext.	x	Installed Only	A	OH	NIC	x
102Ext.	x	Installed Only	A	OH	NIC	x

Legend: x = item to be provided.

Overhead Doors

Provide flush panel overhead doors with standard lift operating style with track, hardware and with manual chain operator. Design and size components to withstand dead and live loads caused by pressure and suction of wind acting normal to plane of wall as calculated in accordance with the State of Connecticut Building Code. Panels: Flush steel construction; outer steel sheet of 28 gage thick, paneled profile; inner steel sheet of 28 gage thick, flat profile; core reinforcement of 16 gage thick sheet (G60 galvanization) steel roll formed to Z-shape, rabbeted weather joints at meeting rails; insulated. Glazed window lites to be as indicated in the contract drawings, set in place with resilient glazing channel. Provide a 11 gage thick; 3 inch wide rolled steel track, continuous one piece per side; galvanized steel mounting brackets, 1/4 inch thick. Heavy duty hinges and adjustable roller holders of galvanized steel; floating hardened steel bearing rollers, located at top and bottom of each panel, each side. Lift Mechanism with torsion spring on cross head shaft, with braided steel lift cables. Provide sill and jamb weather-stripping. Inside side mounted, adjustable keeper interior handle with slide latch. Chain Manual Operation shall have a maximum exertion of 25 lbs force.

Exterior Windows

Provide thermally broken aluminum extrusion fixed windows, as indicated in the construction documents. Provide double insulated glazing with low emissivity glazing, clear annealed glass, and argon filled.

Finishes

Paint

The following are a list of surfaces to receive paint and/or coated products. Apply all applications as per manufacturer recommendations. All surfaces listed are for reference and may not apply to this project. The design/build contractor shall evaluate which surfaces are applicable. Provide (1) gallon of extra primer, paint, and stain.

- A. Steel - Unprimed:
 - 1. One coat of alkyd primer.
 - 2. Two coats of alkyd enamel, gloss.
- B. Steel - Shop Primed:
 - 1. Touch-up with zinc chromate primer.
 - 2. Two coats of alkyd enamel, gloss.
- C. Steel - Galvanized:
 - 1. One coat galvanize primer.
 - 2. Two coats of alkyd enamel, gloss.
- D. Aluminum - Mill Finish:
 - 1. One coat etching primer.
 - 2. One coat of alkyd enamel, gloss.
- E. Wood - Painted:
 - 3. One coat of latex prime sealer.
 - 4. One coat of latex enamel, semi-gloss.
- F. Concrete Walls (Vitreous Paint):
 - 1. One coat of block filler.
 - 2. Two coats of polyester epoxy, solvent or water-based, gloss or semi-gloss coating.

Specialties

Exterior Signage

Provide plastic faced two color/tone signs at all doors. All signs shall be handicapped accessible and meet all applicable accessibility requirements. Each sign shall read "Maintenance Garage". The Owner reserves the right to edit each signs "message" prior to installation. Provide accessibility symbol and Braille "message" to all areas required by code on the sign panel in raised pictogram.

MECHANICAL SYSTEMS

PART 1 - GENERAL

1.1 GENERAL

- A. The General Conditions and Supplemental General Conditions are included as work of this Division.

- B. All work shall be done in strict accordance with the International Mechanical Code (IMC – 2015), the International Energy Conservation Code (IECC - 2015), applicable NFPA Standards, the State of Connecticut Building Code, the Connecticut Fire Safety Code, applicable Regulations of the State of Connecticut, applicable Connecticut Statutes and local ordinances/regulations.
- C. All equipment shall be listed by UL or other independent testing agency that is acceptable to the Authority Having Jurisdiction.
- D. The Contractor shall bear the cost of all fees, permits, licenses and taxes in connection with his work.
- E. All equipment, components, and materials shall be new.
- F. Contractor shall be responsible for any signed and sealed drawings required by the local officials for permit.
- G. The Contractor shall provide a Warrantee covering all material and workmanship for one (1) year following the date of acceptance.
- H. Upon completion of the project, Contractor shall fully instruct the Owner in the operation, adjustment and maintenance of all equipment and systems furnished.
- I. All equipment and products shall be installed in accordance with the manufacturer's instructions and recommendations.
- J. Should the D/B Contractor chose to provide a different heating system that that provided in Drawing M100, the heating system design loads for the purpose of sizing systems and equipment shall be determined in accordance with the ASHRAE Handbook – Fundamentals, or other generally accepted engineering standard that is acceptable to the Authority Having Jurisdiction. Calculations shall be submitted to Owner for review prior to ordering of equipment. The alternative heating system shall be submitted to the Owner for review/acceptance at the initial design stages of the project. Gas piping shall be higher than door heads, providing maximum headroom in bays. Gas piping shall be color coded labeled for every 20' of run.

1.2 SCOPE OF WORK – GENERAL REQUIREMENTS

- A. The Contractor shall furnish and install a complete mechanical system for the new facility which includes and consists of all materials, equipment, labor, transportation, facilities, and all operations and adjustments required for the complete and operation installation of the mechanical work noted on drawing M100.
- B. Open Bays
 - 1) Four ceiling suspended horizontal unit heaters will be provide with a separate wall mounted thermostat, these units will be utilized as the primary heat source for the space, all as indicated in the construction documents.
 - 2) The Contractor shall verify in the field all measurements necessary for the work. Verify thermostat and sensor locations with the Owner before installation.

- C. Open Bay Exhaust Fans: Provide two exhaust fans in walls in locations directed by the Owner to ventilate the building at a rate of 6 air changes per hour. The exhaust fans shall index on by thermostat or wall switch. Outside air dampers shall be interlocked with fans.

ELECTRICAL SYSTEMS

PART 1 – GENERAL

1.3 GENERAL

- A. Architect's General Conditions are a part of this Division. All work shall be done in strict accordance with the latest applicable issue of the National Electrical Code, local Codes and utility company requirements. All equipment is to be UL approved. The Contractor shall bear the cost of all fees, permits, licenses and taxes. Utility company charges for the permanent electric service shall be included in the Contractor's Bid.
- B. Contractor shall be responsible for any signed and sealed drawings required by the local officials for permit.
- C. The Contractor shall provide a guarantee covering all material and workmanship for one (1) year following the date of acceptance, except that the generator and all LED lighting shall be guaranteed for a period of five (5) years.
- D. Upon completion of the project, Contractor shall fully instruct the Owner in the operation, adjustment and maintenance of all equipment and systems furnished.
- E. Contractor shall provide Owner with three (3) sets of complete maintenance and operating instructions, and technical data, in booklet form, of all equipment and devices furnished in Contract, including as-built drawings for the project
- F. All equipment and products shall be installed in accordance with the manufacturer's instructions and recommendations.

1.4 SCOPE OF WORK

- A. The Contractor shall furnish and install a complete electrical system for the new facility which includes, but is not limited to: underground conduit for electrical secondary services at 480V; transformer and 208/120V panelboard including circuit breakers and feeders; LED light fixtures; exit signs; switches, receptacles, disconnect switches, conduit and branch wiring; wiring of all HVAC and plumbing related equipment; emergency lighting fixtures to serve all egress paths; perimeter security system; and all other items and equipment as specified.
- B. Provide 100 ampere, 208/120 volt, 3-phase electric service from the building. Provide a 480V feed from the existing electrical switchgear located in the High School building. Conduit shall be routed at ceiling level in the electrical room and the boiler room. Conduit shall be EMT inside the building, transition to RGS where it exits the outside wall and then transition to PVC under paved and unpaved areas. Transformer shall be hung on the wall above the electrical panel. Garage panel shall be located in the main bays. Provide 3 feet clear in front of all electrical

- equipment. Provide 24 space panel with breakers as required for lighting, receptacles, and equipment.
- C. Provide power for ceiling suspended mechanical equipment as defined in mechanical scope. Coordinate with mechanical contractor for division of responsibility for disconnects, starters, controls, etc.
 - D. Provide emergency lighting fixtures with battery backup wired ahead of the overhead light switching and to come ON in the event of any normal lighting power loss. Emergency lighting coverage shall be provided in all paths of egress in the bays and outside each required egress door. Emergency lighting to meet the following average lighting levels: 1.0 FC at entrances within 10 feet of the entrance with a minimum of 0.1 FC.
 - E. Provide polycarbonate LED type exit signs marking the location of and path to all required egress doors where more than one path of egress is required. Exit signs shall be battery backup powered for each area.
 - F. Provide convenience duplex receptacles throughout the garage as required to serve the anticipated use. All receptacles in the maintenance bay shall be GFCI type. Provide receptacle or non-fused disconnect switches for all overhead doors and wiring of all controls furnished with the doors. Provide 2 cord reels with power and/or light in the maintenance bay. Circuits shall be wired with no more than 7 outlets per 20 ampere circuit.
 - G. Provide 8 foot LED industrial fixtures in the maintenance bays. Provide for an average of 35 FC at the floor.
 - H. Provide (3) three wall mounted full cutoff LED fixtures above vehicle bay doors spaced evenly along the front. Select fixture heights and wattages to comply with all exterior lighting ordinances and to meet the following average lighting levels: 3.0 FC at entrances; 2.0 FC for drive lanes and parking areas. All exterior lighting shall be wired through a combination of photocell and timeclock.
 - I. Provide wall switches for control of light fixtures in all areas.
 - J. Provide an empty conduit from the school to the new Maintenance Garage for current use and future uses:
 - 1) Power: 4" diameter
 - 2) Security/Data: 2" diameter
 - 3) Fire Alarm: 2" diameter
 - 4) Spare: 2" diameter
 - K. The electrical system shall be complete in all respects, tested, approved and ready for the beneficial use of the Owner.

1.5 FIELD MEASUREMENTS

- A. The Contractor shall verify in the field all measurements necessary for his work. Conduits, switches, receptacles, panels and light fixtures which have not already been installed may be

relocated up to ten (10') feet from intended location when so directed by the Owner, at no cost to the Owner. Verify all interior lighting fixture locations and mounting heights with the Owner before installation.

1.6 WIRING METHODS

- A. Electrical Metallic Tubing (EMT) shall be used for feeders run above ground and all exposed branch circuit and communication wiring including all exposed runs in vehicle bays.
- B. Rigid Galvanized Steel (RGS) shall be used for exterior riser above ground from the exit point of the building to grade level.
- C. Polyvinyl chloride (PVC) conduit may be used for underground Schedule 80m under paved areas and Schedule 40 under unpaved areas. All elbows for primary and secondary electrical service shall be rigid galvanized steel conduit.
- D. Flexible Metallic Conduit (FMC) or liquidtight flexible metallic conduit (LFMC) shall be used for connections to vibrating mechanical equipment.
- E. Wire #10 AWG and smaller shall be solid conductor with THWN / THHN insulation as required. Size #8 and larger shall be stranded conductor with Type THWN / THHN insulation, unless otherwise indicated. Minimum size wire for light and power circuits shall be #12. All conductors shall be soft-annealed copper. Where practical and not otherwise stated, circuits on each of 3-phase legs may be combined with the neutral and run back to panel. The Contractor shall include a green ground conductor for all circuits; the use of the conduit system or cable covering as the sole means of grounding will not be permitted.
- F. All exposed conduits shall be run neatly in lines parallel or perpendicular to building walls. All splices shall be made with listed spring connectors. Entire wiring system shall be grounded as mentioned above. Connections to mechanical equipment shall be in flexible metallic tubing.

1.7 PANELBOARDS

- A. All panelboards shall be 208/120 Volt, 3-Phase, 4-Wire. Panelboards shall be furnished with main circuit breaker and bolt-on type branch breakers, copper bus, catch locks, ground bus, circuit index card holder and hinged door-in-door cover. Panelboard short circuit rating shall match rating of panels in the High School building. Provide circuit breakers as required.

1.8 DISCONNECT SWITCHES

- A. An unfused disconnect switch shall be furnished and installed for all equipment.
- B. Safety switches shall be heavy-duty Type in NEMA enclosures suitable for the environment in which they shall be installed, NEMA1 inside and NEMA3R outside. Switches shall be rated for 240 VAC as manufactured by General Electric, Square D or Westinghouse and equivalent to the following General Electric types:
 - 1) Fused disconnect 2- and 3-pole - Type TH
 - 2) Non-fused disconnect switches - Type THN

- 3) Fused or non-fused, rain-tight (WP) disconnect switches in NEMA 3R enclosures - Type TH and/or Type THN
- C. Motors requiring disconnecting means remote from the Controller shall have an unfused switch mounted as close as possible to the motor.

1.9 FUSES

- A. All fuses shall be UL listed, non-renewable type as manufactured by Bussman or acceptable equivalent. Fuses rated at 1/10 Ampere and up to 600 Amperes shall be equivalent to Bussman Type LPN-RK (250 Volt) UL Class RK1, low peak, dual-element, time delay fuses. Fuses shall have separate short circuit and overload elements and have an interrupting rating of 200,000 Amperes.
- B. All fuses shall be installed so that the size is readily visible.
- C. The Contractor shall furnish to the Owner six (6) spare fuses for each size of fuse.

1.10 POWER, MOTOR AND EQUIPMENT WIRING

- A. The Contractor shall furnish and install all wiring for all motors and equipment which will be furnished and set in place by work of other sections on this project.
- B. Conduit connections to motor frames shall have minimum of 18 inches of flexible steel seal-tite conduit to reduce vibrations and noise being transferred to other parts of the buildings.

1.11 SWITCHES, RECEPTACLES AND ACCESSORIES

- A. Wall switches shall be mounted 48 inches above finished floor, opposite hinged side of door, unless otherwise indicated. Where there is more than one (1) switch in one (1) location, switches shall be ganged under one (1) cover. Duplex receptacles shall be mounted 48 inches AFF unless otherwise indicated. All wall switches and receptacles shall be flush-mounted, where applicable, and furnished with stainless steel cover plates or other type plate as requested by Owner.
- B. Outlet and switch boxes shall be zinc-coated steel.
- C. Switches and receptacles shall be as manufactured by Arrow Hart, Leviton, Pass and Seymour or Hubbell and equivalent to the following Specification grades:
 - 1) Single-pole switches shall be Hubbell #1221, 2-pole switches shall be Hubbell #1222, 3-way switches shall be Hubbell #1223, 4-way switches shall be Hubbell #1224
 - 2) Momentary contact switches shall be single-pole, double-throw equivalent to Hubbell #1557
 - 3) Switches with pilot lights shall be Hubbell #1221-PL
 - 4) Duplex grounding type receptacles shall be 20 Ampere Hubbell #5362
 - 5) Isolated ground type receptacles shall be 20 Ampere Hubbell #IG5362.

- 6) Weatherproof outlet shall be Hubbell #GF-5362, mounted in a Crouse-Hinds "FS" backbox complete with "WLRD" coverplate or acceptable equivalent. Provide in all vehicle bays and exterior locations.
- 7) Ground fault type receptacles shall be Hubbell #GF-5362 feed-through receptacles.
- 8) Provide 14 duplex outlets around the facility and 6 boxes with ¾" conduit at overhead door for future power/switches, linked to the power panel.

1.12 WALL PLATES

- A. All wall plates for switches and receptacles located where wiring is concealed shall have a brushed stainless finish. Plates installed on exposed conduit boxes shall be galvanized and have rounded edges. Ganged switches shall be provided with one-piece gang plates. Wet location coverplates shall be Lexan "in-use" type.

1.13 OUTLET AND JUNCTION BOXES

- A. All boxes shall be securely fastened to the building structure. Suitable means shall be provided to support the outlet box to take the weight of the fixture. Recessed outlet boxes or their extension covers shall be set flush with face of finished wall, but in no case set greater than 1/4 inch behind finished face of wall. Receptacle boxes shall be approximately 48 inches on center above the finished floor, unless otherwise noted. Switch outlets shall be located 48 inches above finished floor, unless otherwise noted. The Contractor shall check with the Architectural Drawings for possible interference.
- B. Junction and outlet boxes where exposed to the weather and wet locations shall be threaded hub type and provided with watertight screw-on covers and gaskets. Floor outlets shall be adjustable type and waterproof where required.

1.14 LIGHTING FIXTURES

- A. The Contractor shall furnish and install all LED lighting equipment (lights, emergency lights, exit signs) complete with lamps ready for operation.
- B. Provide all required supports, hangers and seismic bracing for fixtures, including recessed troffers.
- C. All lamps shall be as manufactured by Philips, General Electric or Sylvania. All LED lamps shall be 3500K with a minimum 80 CRI.

1.15 FIRE-STOPS AND SEALS

- A. All penetrations through fire rated walls, ceilings or floors in which cables or conduits pass shall be sealed with a UL approved fire-stop fitting classified for an hourly rating equivalent to the rating of the wall, ceiling or floor.
- B. Through wall and floor seals shall be used to provide a positive means of sealing pipes or conduits which pass through concrete foundation of a structure below grade or below ground water level. All openings shall be sealed as required by the NEC.

1.16 WARNING TAPE

- A. Color-coded warning ribbon composed of a solid, aluminum foil core encased in a protective plastic jacket shall be placed above all buried electrical utility lines. All tapes shall be highly visible, color-coded and imprinted with the appropriate warning legend. The tape width shall vary from a two (2") inch wide tape buried ten (10") inches below the surface to an 18-inch wide tape buried 50 inches below the surface.
- B. Standard legends shall be marked continuously along the entire length of the tape. A red safety tape imprinted with "CAUTION - ELECTRIC LINE BURIED BELOW" shall be used for all buried primary and secondary electric services. Orange safety tapes shall be imprinted with "CAUTION - TELEPHONE LINE BURIED BELOW" or "CAUTION - TELEVISION CABLE BURIED BELOW".
- C. Warning tapes shall be as manufactured by Allen Systems, Houston, Texas or acceptable equivalent.

1.17 GENERAL WIRING TESTS

- A. At the time of final inspection and test, all wiring and connections throughout the facility must be completed, devices and equipment properly operating, all lighting fixtures installed, and power and lighting circuit and control wiring clearly identified with approved tags ready for acceptance. Each system shall test free from short circuits and from grounds. Fire alarm system shall be tested in the presence of local authority having jurisdiction.

END OF SECTION