Jones Gillam Renz Architects

Address
730 N 9th St.
Salina, KS 67401

1881 Main St., Suite 301
Kansas City, MO 64108

Contact
jgr@jgrarchitects.com
(785) 827-0386

Web
jgrarchitects.com

Project Manual

for

USD 305 SALINA SCHOOL DISTRICT
SOUTH HIGH FOOTBALL FIELD PAVING
Salina, KS

March 18, 2026

Project No. 26-3566

USD 305 SALINA SCHOOL DISTRICT
SOUTH HIGH FOOTBALL FIELD PAVING
SALINA, KANSAS

Project No. 26-3566

DATE OF DRAWINGS AND SPECIFICATIONS March 18, 2026

OWNER	USD 305 SALINA SCHOOL DISTRICT 1511 Gypsum Ave, Salina, KS 67401 Paul Mensching, Director of Operations 785 309 4712
ARCHITECT	JONES GILLAM RENZ ARCHITECTS, INC Charles A. Renz, Project Architect 730 N. 9th Street Salina, KS 67401 785 827 0386
CIVIL	KAW VALLEY ENGINEERING Matthew Rowe, P.E. 1627 Sunflower Lane, Salina, KS 67401 785 823 3400

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USD 305 Salina School District
South High Football Field Paving
Salina, Kansas

Project No. 26-3566

Jones Gillam Renz Architects, Inc
730 N. 9th St.
Salina, Kansas 67401
785-827-0386

INVITATION TO BID

Sealed Bids, will be received by Paul Mensching at USD 305 Salina School District, for the furnishing of all labor and materials as hereinafter specified for the construction of the South High Football Field Paving. **Bids shall be delivered to the USD 305 Board of Education Building, 1511 Gypsum Ave., Salina, KS** before **Tuesday, April 7, 2026 at 2:00 p.m.** at which time the bids will be opened and read aloud. Bids received after this time will not be accepted.

1. PROJECT SCOPE
   a. New concrete slab and associated site prep.
   b. Slab includes various thicknesses as required for installation of new prefabricated bleacher system.
   c. Installation of underground conduits to coordinate with Grandstand Press box requirements and future needs.
   d. New sidewalk.
   e. New curb cuts in existing sidewalk.
   f. Site grading and associated drains, flumes, trenches, etc. as required onsite drainage.
   g. New yard hydrant and associated underground water piping.

2. PRE-BID CONFERENCE
   Pre-Bid Conference will be held on **Thursday, March 26, 2026 at 1:00 p.m. at building site, 730 E. Magnolia, Salina, KS.** Attendance is optional. Please notify Architect if you are not attending. Bidders shall visit the site and become familiar with existing conditions prior to submitting a bid.

3. COMPLETION TIME
   Completion date for the project is to be bid in calendar days: To be Bid by Contractor and stated on the Bid Form.

4. The GENERAL CONSTRUCTION CONTRACT will include General Construction, Mechanical, and Electrical Work combined into one Contract.

5. As a condition precedent to Contract Award, type of work completed and proposed Subcontractors will be carefully considered. Owner is not obligated to accept lowest or any other bid.

6. **The Owner has identified a Select Bidders List for the General Construction**.

7. The Drawings, Specifications, and Contract Documents may be obtained by bona fide Prime Bidders (Mechanical and Electrical, and Subcontractors) from Jones Gillam Renz Architect, 730 N. Ninth Street, Salina, Kansas 67401, 785-827-0386 upon deposit of $200.00 for one (1) set of General Construction, Mechanical and Electrical Drawings and Specifications.

   Electronic Drawings and specifications will be available for review on the website at www.jgrarchitects.com. **Mechanical, Plumbing and Electrical Subcontractors who are bidding from documents via website or plan room must contact the office of Jones Gillam Renz Architects, 785.827.0386 to register as an official Plan Holder.**

   Those who submit prime bids may obtain refund by returning sets in good condition no more than one (1) week after bids have been opened. No refund of deposit will be made to Contractors not submitting a bid, unless all documents are returned in good condition five (5) days prior to time of receiving bids.

   CONTRACT DOCUMENTS will be on file and may be examined at the following locations:
   Jones Gillam Renz Architects, 730 North 9th Street, Salina, KS 67401, ph. 785-827-0386, www.jgrarchitects.com
   Salina Blueprint, 209 S. Santa Fe Ave., Salina, KS 67401, ph. 785-827-6182, www.salinablue.com
   Salina Area Chamber of Commerce Plan Room, 120 West Ash, Salina, KS 67401, ph. 785-827-9301, www.salinakansas.org

8. **BID SECURITY in the amount of 5% of the bid must accompany each bid in accordance with INFORMATION FOR BIDDERS.**

BY ORDER OF:

Paul Mensching,
USD 305 Salina School District
Salina, Kansas

INFORMATION FOR BIDDERS

1. EXAMINATION

Before submitting their bid, each Bidder shall carefully examine all documents pertaining to the work, visit the site of the work, and inform themselves as to all existing conditions under which the work will be performed. Submission of a bid will be considered presumptive evidence that the Bidder is fully aware of the conditions of the work, requirements of the Contract Documents, pertinent State and Local codes, conditions of labor and material markets, and has made allowances in their bid for all work and all contingencies. Contractors will not be given extra payments for conditions which can be determined by examining the site and documents.

2. QUESTIONS AND INTERPRETATION OF DOCUMENTS

Should a Bidder be in doubt as to the meaning of any part of the Drawings, Specifications or other proposed Contract Documents and/or find discrepancies in or omissions from the Drawings, Specifications and Contract Documents, he shall contact the Architect immediately per Article 3, Subparagraph 3.2.1 of the AIA General Conditions. Any interpretation of the proposed documents will be made only by Addendum duly issued and copy of such Addendum will be emailed to each person receiving a set of such documents. The Architect and Owner will not be responsible for any other explanation or interpretation of the proposed documents.

3. GENERAL CONSTRUCTION BID

a. The General Construction bid shall incorporate all of the departments of Work (General Construction, Electrical, and Mechanical Work) into one (1) bid.
It is preferred that General Contractors work with Prime subcontractors with whom they have previous working relationships, including at least three previous projects of similar scope. Contractor/Subcontractor experience and relationship may be considered by the owner in the evaluation of bids and acceptance of bids.

b. The General Contractor shall assume all responsibility for supervision and coordination of the Work.

c. The General Contractor shall furnish Performance and Payment Bonds in the full amount of the Work (Total of General Construction, Electrical, and Mechanical Work).

d. The General Contractor shall carry and pay the premium covering the General Construction Work, for Contractors and Subcontractors Insurance as specified in Supplementary Conditions of the Contract.

4. BID PROCEDURE

a. Bids will be received at the time and place stated in the INVITATION TO BID. Bids received after the time stated will be returned unopened.

b. No oral or telephonic bids will be considered, but modifications by email of bids already submitted will be considered if received prior to time set for bid opening.

c. Any addenda issued during the time of preparation of bids are to be acknowledged on the Bid Form and in closing a Contract, they will become a part thereof.

d. Each Bidder is required to bid all alternates included in the Bid Form, except that should they desire not to bid an Alternate, they may insert the words “No Bid” in the space provided for such Alternates. In such case, if it is determined to use such Alternate, the fact that the cost of the material, type, or method bid may be lower than that chosen shall not constitute the basis of a claim by the Bidder that the Contract be awarded to him. If an Alternate Price called for involves no change in price, Bidder shall so indicate by writing the words, “No Change” in the space provided. Refer to Section 01019 - SPECIAL PROVISIONS. Each Bidder is required to fill in all unit cost items shown on the Bid Form. Failure to comply may be cause for rejection.

e. Bids shall be submitted on the forms provided. All blank spaces on the forms shall be fully completed in words as well as figures. Bid Forms must be signed in longhand, with name typed below signature. Where Bidder is a corporation, Bid Forms must be signed with legal name of corporation, followed by the name of the State of Incorporation, the legal signature of an officer authorized to bind the corporation to a contract, Attest and Seal Impression. A copy of the Bid Form is bound herein for the convenience of the Bidders and is not to be detached or filled out. Separate Bid Forms, in triplicate, will be furnished to all Bidders.

f. Submittals of Bids shall be as follows:

1) Bids, together with Bid Security, shall be sealed in an opaque envelope, labeled "SOUTH HIGH FOOTBALL FIELD PAVING, SEALED BID, DO NOT OPEN" addressed to: USD 305 SALINA SCHOOL DISTRICT. **Bids shall be delivered to the office of JGR Architects, 730 N. Ninth St., Salina, KS** before **2:00p.m. on Tuesday, April 7, 2026. Bids will be opened in private session with the owner the same day.**

5. CONTRACT GUARANTEE

Successful Bidder must deliver to the Owner the following Bonds in an amount no less than 100% of the accepted bid, as security for the faithful performance of the Contract.

a. Performance and Payment Bond as per General Conditions.
b. Statutory Bond, as required in Section 01019 - SPECIAL PROVISIONS.

6. WITHDRAWAL OF BIDS

A bid may be withdrawn on written or faxed request and by request of Contractor personally, received or made prior to time fixed for bid opening. No bid may be withdrawn after opening of bids.

7. INTERPRETATION OF QUOTED PRICES

In case of a difference in written words and figures in a bid, the amount stated in written words shall govern.

8. TIME OF CONSTRUCTION AND LIQUIDATED DAMAGES

Refer to Section 01019 - SPECIAL PROVISIONS.

9. DISQUALIFICATION

The Owner reserves the right to disqualify bids, before or after opening upon evidence of collusion with intent to defraud or illegal practices upon part of the Bidder. Bids will be opened as stated in the Invitation to Bid.

10. SALES TAX EXEMPTION

Refer to Section 01019 - SPECIAL PROVISIONS.

*****

USD 305 South High Football Field Paving Salina, Kansas
BID FORM

Bid of _____
(Firm Name)
Date _____

BID FORM FOR:
USD 305 Salina School District
South High Football Field Paving, Salina, Kansas

TO: **USD 305 Salina School District**
1511 Gypsum Ave
Salina, KS 67401

In compliance with your INVITATION TO BID, the undersigned proposes to furnish all labor and materials and perform all work for the General Construction, including Mechanical and Electrical Work, incidental for the construction and equipping of USD 305 South High Football Field Paving, Salina, Kansas, in strict accordance with the Specifications and the Drawings dated March 18, 2026 mentioned therein for the consideration of the following:

BASE BID _____ **Dollars**

$ _____

The Base Bid includes all allowances as outlined in Section 01019 – Special Provisions.

Number of consecutive Calendar Days to complete this project in accordance with Drawings and Specifications, to be coordinated with General Contractor and subject to Liquidated Damages,

Section 01019 - SPECIAL PROVISIONS -- _____ **DAYS**

The Undersigned acknowledges receipt of the following addenda:

Addendum #1 ____ Addendum #2 _____ Addendum #3 _____ Addendum #4 _____ Addendum #5 _____

ALTERNATE PRICES: For the Alternates as described in the Specifications and/or Drawings, the undersigned agrees to ADD or DEDUCT the following amounts to or from the BASE BID as hereinafter itemized:

ALTERNATE NO.	**ADD/DEDUCT**
Alternate No. 1 If added by addendum.	$_____
Alternate No. 2 If added by addendum.	$_____
Alternate No. 3 If added by addendum.	$_____
Alternate No. 4 If added by addendum.	$_____
Alternate No. 5 If added by addendum.	$ _____

Unit Prices

Unit Price No. 1 Removal, haul-off, and replacement of unsuitable soil $ _____ **per C.Y.**

I (or WE) FURTHER AGREE AS FOLLOWS:

1. To furnish labor and materials for additional work (except Mechanical and Electrical) ordered by the Owner and for which no pre-agreed upon amount has been determined for the cost of the labor and materials involved plus 10% for overhead and profit.
2. To furnish supervision and coordination for 10% of the cost of additional Mechanical and Electrical work ordered by the Owner.
3. To accept the provisions of Section 01019 - SPECIAL PROVISIONS regarding the date of completion of the Project and Liquidated Damages.
4. If written notice of the acceptance of the Bid is mailed, telegraphed or delivered to the Undersigned within 30 days after the date of the opening of the Bids, or anytime thereafter before this Bid is withdrawn, the Undersigned will, within ten (10) days after the date of such mailing, telegraphing or delivery of such notice, execute and deliver a contract in accordance with AIA Document A101, Standard Form of Agreement Between Owner and Contractor, and give Performance Bond in accordance with the Specifications and bid as accepted.
5. That upon failure or refusal to execute and deliver the contract and bonds required within ten (10) days after receipt of notice of acceptance of the Bid, that security deposited with Bid shall be forfeited to the Owner as liquidated damages for such failure or refusal.

DECLARATION:

1. The Undersigned hereby declares that he has carefully examined the Invitation and Information for Bidders, the Drawings and Specifications, has visited the actual location of the Work and has consulted his sources of supply, and has satisfied himself as to all quantities and conditions, and understands that in signing this Bid, he waives all rights to plead any misunderstanding regarding the same.

2. The Undersigned understands that his competence and responsibility and that of his proposed subcontractors, time of completion, as well as any other factors of interest to the Owner will be considered in making the award. The Owner reserves the right to reject any or all bids, to accept or reject alternate bids and unit prices and to waive technicalities concerning the bids received, as it may be in his interest to do so.

_____
(Legal Name of Bidder)

(SEAL, if bid is by a corporation)

_____
(Address of Bidder)

BY _____ in longhand

_____ Typewritten
(Title)

AIA® Document A201™ – 2017

General Conditions of the Contract for Construction

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

USD 305 South High Football Field Paving
Salina, KS
JGR Project #26-3566

THE OWNER:
(Name, legal status and address)

USD 305 Salina School District
1511 Gypsum Ave, Salina, KS 67401
785-309-4712

THE ARCHITECT:
(Name, legal status and address)

Jones Gillam Renz Architects, Inc.
730 N. 9th St., Salina, KS 67401
785-827-0386

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

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

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.

SUPPLEMENTARY CONDITIONS OF THE CONTRACT

1. DEFINITIONS - Supplement Paragraph 1.1 as follows:
   a. When words such as approved, proper, satisfactory, equal, and as directed are used, they imply such reference to the Architect's specific approval and directions.
   b. Provide means to furnish and install.
   c. The provisions of the Agreement take precedence over all other Contract Documents.

2. WARRANTY - Supplement Paragraph 3.5.1 as follows:
   a. Contractor warrants to Owner and Architect that on receipt of notice from either of them, within the period of one (1) year following date of Substantial Completion, that defects in materials and/or workmanship have appeared in the Work, Contractor will promptly correct such defects to the state of condition originally required by the Contract Documents at Contractor's expense.

3. SHOP DRAWINGS - Supplement Paragraph 3.12 as follows:
   a. The Contractor shall submit **one (1) electronic copy** of all Shop or Setting Drawings and Schedules required for the work of the various trades, after same have been checked and compared with the Contract Document Requirements, and after checking with field conditions at the job and so certified on the Drawings by the Contractor. Above Drawings will not be checked by Architect unless same bear certification.
   b. Architect's approval is subject to notations on Drawings, Compliance with Drawings and Specifications, and conditions and measurements at project. Measurements and quantity not checked or approved.

4. SAMPLES - Supplement Subparagraph 3.12.3 as follows:
   a. All samples as called for in the various Sections of this Specification and any other samples, as directed, shall be furnished by the Contractor for approval.
   b. All samples of materials that require approval as to color, texture, finish and type shall be furnished at the same time, so that an intelligent selection of colors and textures may be made by the Architect.

5. COLOR SELECTIONS
   a. The Contractor shall provide for and coordinate into the project construction schedule, a 6-week time frame for the Architect/Designer to make final color selections from Contractor's submittals, obtain approval from the Owner and to submit a color schedule, indicating what colors go where, to the Contractor. Time frame begins when Architect has received 100% of submittals listed below.
   b. Submittals, i.e., actual samples, manufacturers' literature, full color line options, etc., shall include as a minimum, but not limited to:

Carpet Types	Paint
Sheet Vinyl Flooring	Corner Guards
Vinyl Composition Tile Flooring	Plastic Laminate (Manufacturer)
Vinyl Base	Wood Stain for Doors and Woodwork
Ceramic Wall Tile	Aluminum Storefront System
Ceiling Types	

6. CLEAN UP - Supplement Paragraph 3.15 as follows:
   a. Each Contractor shall, at all times, remove any and all of his rubbish from the buildings and grounds and keep the building site clean.
   b. In addition to the general broom cleaning, the General Contractor shall do the following special cleaning for all trades at the completion of the work:
      1) Glass. Remove putty, stains and paint from all glass and wash and polish same. Care shall be taken not to scratch the glass.
      2) Painted, Decorated, and Stained Work. Remove all marks, stains, fingerprints and other soil or dirt from all painted, decorated, and stained work.
      3) Temporary Protection. Remove all temporary protections; clean and polish all floors at completion.
      4) Woodwork. Clean and polish all woodwork upon completion.
      5) Hardware. Clean and polish all hardware for all trades. This shall include removal of all stains, dust, dirt, paint, etc., upon completion.
      6) Tile Work. Remove all spots, soil, and paint from all tile work, wash same upon completion.
      7) Fixtures and Equipment. Clean all fixtures and equipment, removing all stains, paint, dirt and dust.
   c. All combustible rubbish, and all debris and other rubbish shall be removed entirely from the premises.

7. MUTUAL RESPONSIBILITY OF CONTRACTORS - Supplement Paragraph 6.2 as follows:
   a. General Contractor shall assume general coordination and direction of the project. General Contractor shall cooperate with Mechanical and Electrical Contractors and other subcontractors and/or suppliers on the Work and install their work in sequence to facilitate and not delay the completion of the project. The Architect is not the coordinator or expeditor of the work of the contractors and/or subcontractors referred to hereinbefore.

8. CHANGES IN THE WORK
   Refer to Paragraph 7.2 and insert the following:
   a. Whenever a Change Order involves net cost decrease, the CREDIT to the Owner shall be such net cost decrease. Whenever a Change Order involves a summary net increase, the Contract shall be increased by the amount of such net cost increase plus 10% of such net cost for overhead and profit. The General Contractor will furnish supervision and coordination for 10% of the cost of additional Mechanical and Electrical work ordered by the Owner.
   b. The Contractor shall furnish the Owner an itemized accounting with supporting data used in computing the value of any change that might be ordered.
   c. Change Orders must state a number of added days or days to be deleted from completion time. If no change in days is required by the change order, write NONE. Failure to comply with above voids any later request for extra time.

9. APPLICATION FOR PROGRESS PAYMENTS AND CERTIFICATION FOR PAYMENT
   a. Amend Subparagraph 9.3.1 and insert the following: On or before the 25th day of each month, the Contractor shall submit to the Architect an itemized Application for Payment supported by such data substantiating the Contractor's right to payment as the Owner or Architect may require.
   b. Amend Subparagraph 9.4.1 and insert: If the Contractor has made application for payment as above, the Architect will, with reasonable promptness and within seven (7) days after receipt of the application, issue an application for payment to the Owner, with a copy to the Contractor in the amount of 90% of the value of the Contract the Architect determines has been completed to the date of application, thus a 10% retainage, less any amount paid to the Contractor, or state in writing his reason for withholding an application as provided in Subparagraph 9.5.1.
   c. Date of payment of the Application for Payment by the Owner is hereby defined as the earliest possible date that the Owner can prepare vouchers after receipt of Application for Payment from the Architect and approval of same by any governing body of the Owner and issuance of vouchers to cover Application for Payment.

10. CONTRACTOR'S LIABILITY INSURANCE
   a. Workers' Compensation and Employers Liability Insurance - Refer to Subparagraph 11.1.1.
   b. Bodily Injury and Property Damage - Refer to Subparagraph 11.1.2. Limits shall be as follows:
      (1) Limits of liability coverage shall be $2,000,000.00 Combined Single Limit for Bodily Injury and Property Damage.
   c. Owner's Protective Liability Insurance - Refer to Paragraph 11.2 - Owner's Option.

11. PERFORMANCE AND PAYMENT BONDS - Supplement Subparagraph 11.4.1 as follows:
   a. Bond shall be equivalent to AIA Form A311, two part Performance Bond and Labor and Materials Bond with amount shown on each part equal to 100% of the total amount payable by the terms of the Contract. Surety shall be company licensed to do business at the place of building and shall be acceptable to the Owner.

12. PROPERTY INSURANCE MARINE ALL RISK SPECIAL BUILDERS RISK AND TRANSIT FORM
   Refer to Paragraph 11.4 Property Insurance and insert the following:
   a. Until the Work is completed and accepted by the Owner, **the <u>General Contractor</u> shall effect and maintain total Property Insurance (Marine All Risk Special Builders Risk and Transit Form)** upon the Work at the site to 100% of the insurable value thereof (plus 8% of this insured value for Architect's Fee in connection with any loss covered by this insurance) including items of labor and materials connected therewith in or adjacent to the structure insured, materials in place or to be used as a part of the permanent construction, including surplus materials, shanties, protective fences, bridges or temporary structures, miscellaneous materials and supplies incidental to the Work, and such scaffoldings, stagings, towers, forms and equipment as are not owned or rented by the Contractor, the cost of which is included in the cost of the work. EXCLUSIONS: This insurance does not cover any tools owned by mechanics; any tools, equipment, scaffoldings, stagings, towers and forms owned or rented by the Contractor; the capital value of which is not included in the cost of the work, nor loss of equipment, materials, tools, etc., by theft. **Contractor shall not commence construction prior to receipt of policy copy from Owner.**
   b. This insurance shall include the interest of the Owner, the Contractor, Subcontractor, and Sub-Subcontractor in the Work.

END OF SECTION

Standard Form of Agreement Between U.S.D. 305 (Owner) and Contractor for Fixed Price Construction

Agreement Between the Owner:
Salina U.S.D 305
1511 Gypsum
Salina, Kansas 67401

and the Contractor:

for the following Project:
USD 305 South High Football Field Paving
730 E. Magnolia
Salina, Kansas 67401
Owner Project Number TBD

The Architect:
Jones Gillam Renz Architects, Inc.
730 N. 9th St.
Salina, Kansas 67401

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The Owner and Contractor agree as follows.

I. The Contract Documents.

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

a. The Agreement is this executed *Standard Form of Agreement Between U.S.D. 305 (Owner) and Contractor for Fixed Price construction*

b. The General Conditions are *AIA Document A201-2017, General Conditions of the Contract for Construction, as amended.*

c. The Supplementary and other Conditions of the Contract:
   i. *K.S.A. 44-1030: State and local government contracts; mandatory provisions.*

d. The Specifications. *As presented by Jones Gillam Renz Architects in the Project Manual dated March 18, 2026 and titled South High Football Field Paving.*

e. The Drawings. *As presented by Jones Gillam Renz Architects in the drawing set titled: USD 305 South High Football Field Paving (13 sheets).*

f. The addenda:
   i.

II. The Work of this Contract.

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

III. Contract Dates.

a. **Date of Commencement.** The Date of Commencement of the Work shall be *fixed in the notice to proceed issued by the Owner.*

b. **Date of Substantial Completion.** The Contractor shall achieve Substantial Completion of the entire Work not later than: *July 31, 2026.* If the notice to proceed is not issued by May 1, 2026, the date of substantial completion shall be for each calendar day after May 1 until the notice to proceed is issued. The Date of Substantial Completion is subject to adjustments of this Contract Time as provided in the Contract Documents.

IV. Contract Sum.

a. The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be *$*_____ subject to additions and deductions as provided in the Contract Documents.

b. The Contract Sum is based upon a base bid of *$*_____. Owner reserves the right to accept alternates and to award or amend the Contract accordingly within 60 days of the Notice of Award.
   i.

c. Allowances are included in the Contract Sum as described in Specification Section 01019 of the Contract Documents.
   i. Contingency Allowance $10,000.00

d. The following is a mutually accepted unit price: TBD

V. Payments.

a. **Progress Payments.** Based upon Application for Payment submitted to the Architect by the Contractor and Certificates for Payment issued by the Architect, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents. The period covered by each Application for Payment shall be one calendar month ending on the *15th day of the month.*

   i. Provided that an Application for Payment is received by the Architect not later than the 20th day of a month, the Owner shall make payment of the certified amount to the Contractor not later than the 15th day of the following month.

   ii. Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents.

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

   iv. Subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

      1. Take that portion of the Contract Sum properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the Contract Sum allocated to that portion of the Work in the schedule of values, less retainage of ten percent (10%). Pending final determination of cost to the Owner of changes in the Work, amounts not in dispute shall be included as provided in § 7.3.9 of AIA Document A201-2017, General Conditions of the Contract for Construction, as amended;

2. Add that portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing), less retainage of ten percent (10%);

3. Subtract the aggregate of previous payments made by the Owner; and

4. Subtract amounts, if any, for which the Architect has withheld or nullified a Certificate of Payment as provided in § 9.5 of AIA Document A201-2017, as amended.

v. The progress payment amount determined in accordance with paragraph V.a.iv 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 Architect shall determine for incomplete Work, retainage applicable to such work and unsettled claims; and

2. Add, if final completion of the Work is thereafter materially delayed through no fault of the Contractor, any additional amounts payable in accordance with § 9.10.3 of AIA Document A201-2017, as amended.

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

b. **Final Payment.** The Owner's final payment to the Contractor shall be made no later than 45 calendar days after the issuance of the Architect's final Certificate for Payment. Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

i. The Contractor has fully performed the Contract except for the Contractor's responsibilities to correct Work as provided in § 12.2.2 of AIA Document A201-2017, as amended, and to satisfy other requirements, if any, which extend beyond final payment; and

ii. A final Certificate for Payment has been issued by the Architect.

VI. Dispute Resolution. See Article 15 of AIA Document A201-2007, as amended.

VII. Termination or Suspension. See Article 14 of AIA Document A201-2007, as amended.

VIII. Miscellaneous Provisions.

a. **Interest on Late Payments.** See § 13.5 of AIA Document A201-2007, as amended.

b. **The Owner's Representative:**

Paul Mensching
1835 S. Broadway
Salina, KS 67401
785-309-4710 (office)
Paul.mensching@usd305.com

c. **The Contractor's Representative:**

d. **Changes in Representation.** Neither the Owner's nor the Contractor's representative shall be changed without ten days written notice to the other party.

IX. Insurance and Bonds. See Article 11 of AIA Document A201-2017, as amended.

This Agreement entered into as of: _____
(*Month Day, Year)*

_____	_____
OWNER *(Signature)*	CONTRACTOR *(Signature)*
Paul Mensching, Exec. Director of Operations	
_____	_____
(Printed name and title)	*(Printed name and title)*

GEOTECHNICAL EXPLORATION REPORT
Salina SHS Stadium Improvements
730 East Magnolia Road
Salina, Kansas

UES Project No. A24125.00993.000
January17, 2025

Prepared by:

GSI Engineering, LLC
A UES Company (UES)
4503 East 47th Street South
Wichita, Kansas 67210
(316) 554-0725

Prepared for:

JGR Architects
730 N. Ninth Street
Salina, Kansas, 67401

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Kansas.

January 17, 2025
Colin D. Parker, P.E. Date

My license renewal date is April 30, 2025.
Sections covered by this seal: Sections 1 through 6 and all pages included as appendices within this bound document.

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical-engineering study conducted for a civil engineer may not fulfill the needs of a constructor — a construction contractor — or even another civil engineer. Because each geotechnical- engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client. No one except you should rely on this geotechnical-engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you* — should apply this report for any purpose or project except the one originally contemplated.

Read the Full Report

Serious problems have occurred because those relying on a geotechnical-engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

Geotechnical Engineers Base Each Report on a Unique Set of Project-Specific Factors

Geotechnical engineers consider many unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk-management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical-engineering report that was:

- not prepared for you;
- not prepared for your project;
- not prepared for the specific site explored; or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical-engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light-industrial plant to a refrigerated warehouse;
- the elevation, configuration, location, orientation, or weight of the proposed structure;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical-engineering report is based on conditions that existed at the time the geotechnical engineer performed the study. *Do not rely on a geotechnical-engineering report whose adequacy may have been affected by*: the passage of time; man-made events, such as construction on or adjacent to the site; or natural events, such as floods, droughts, earthquakes, or groundwater fluctuations. *Contact the geotechnical engineer before applying this report to determine if it is still reliable.* A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ — sometimes significantly — from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide geotechnical-construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are Not Final

Do not overrely on the confirmation-dependent recommendations included in your report. *Confirmation-dependent recommendations are not final,* because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations *only* by observing actual subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's confirmation-dependent recommendations if that engineer does not perform the geotechnical-construction observation required to confirm the recommendations' applicability.*

A Geotechnical-Engineering Report Is Subject to Misinterpretation

Other design-team members' misinterpretation of geotechnical-engineering reports has resulted in costly

problems. Confront that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Constructors can also misinterpret a geotechnical-engineering report. Confront that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing geotechnical construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical-engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make constructors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give constructors the complete geotechnical-engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise constructors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure constructors have sufficient time* to perform additional study. Only then might you be in a position to give constructors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Read Responsibility Provisions Closely

Some clients, design professionals, and constructors fail to recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Environmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform an *environmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical-engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk-management guidance. *Do not rely on an environmental report prepared for someone else.*

Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold-prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, many mold- prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical- engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; *none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.*

Rely, on Your GBC-Member Geotechnical Engineer for Additional Assistance

Membership in the Geotechnical Business Council of the Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project. Confer with you GBC-Member geotechnical engineer for more information.

GEOTECHNICAL BUSINESS COUNCIL
of the Geoprofessional Business Association

8811 Colesville Road/Suite G106, Silver Spring, MD 20910
Telephone: 301/565-2733 Facsimile: 301/589-2017
e-mail: info@geoprofessional.org www.geoprofessional.org

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Boring Location Plan

Appendix B - Boring Logs
Key to Symbols
Legend & Nomenclature
Unified Soil Classification System (USCS)

Appendix C - Field & Laboratory Test Results

1. INTRODUCTION

1.1 General

This report summarizes the findings of our geotechnical exploration for the proposed stadium improvements and additions located at the existing Salina South High School in Salina, Kansas. The scope of work was outlined in our proposal dated November 18, 2024. Mr. Paul Mensching, Executive Director of Maintenance and Operations for USD 305, authorized this exploration on December 6, 2024.

The purpose of this geotechnical study is to explore the subsurface conditions at the proposed site with exploratory borings, evaluate the engineering properties of the subsurface materials with appropriate field and laboratory tests, and perform engineering analyses for developing design and construction recommendations for the proposed project.

1.2 Project Description

The proposed project will be located at the existing athletic fields to the west of Salina South High School at 730 East Magnolia Road in Salina, Kansas. We understand the development will consist of the construction of a new press box structure, angle-frame aluminum bleachers, and the installation of a new synthetic turf football/soccer field. We understand the press box will be of prefabricated metal construction, and that the new bleachers and press box structure will be constructed atop a concrete slab. We estimate the structure will have maximum column and continuous wall loads on the order of 30 kips and 2 kips per linear foot, respectively.

We understand that consideration is being given to the possible construction of additional restroom and locker room facilities, but these buildings will not be included in the current improvement project.

We assume site grading required to bring the new structures and turf field the desired elevation will be minimal, with cuts or fills less than 2 feet. Please contact us if site grading will be more significant so we may evaluate and adjust our recommendations if necessary.

A site plan is included in Appendix A for reference.

2. FIELD EXPLORATION

We drilled 11 borings for this geotechnical exploration on December 12, 2024, with a CME 45 truck-mounted drilling rig using 4-inch diameter continuous flight augers. We drilled seven borings within the existing sports field to depths of approximately 10 feet below the site grade at the time of our exploration. We drilled four borings in the bleacher, press box, and additional structure footprints to a depth of approximately 15 feet below the site grade at the time of our exploration.

We selected boring locations based on a preliminary site plan provided by Mr. Charles Renz of JGR Architects in his request for proposal. UES personnel established field locations using a hand-held GPS unit with an accuracy of +/- 10 feet. Boring locations in relation to existing and proposed features are indicated on the Boring Location Plan included in Appendix A. The boring locations should be considered accurate only to the degree implied by the methods used in their determination.

We interpolated ground surface elevations at the boring locations using elevations obtained from ground surface profiling provided by Google Earth. The ground surface elevations at the borings are shown on the boring logs included in Appendix B. The boring elevations should be considered accurate only to the degree implied by the methods used in their determination.

Our drill crew obtained soil samples at the intervals shown on the boring logs in Appendix B. Recovered samples were sealed in plastic containers, labeled, and protected for transportation to the laboratory for further examination, testing, and classification.

We obtained split-barrel samples (designated "Split Spoon" or "S" samples) while performing Standard Penetration Tests (SPT) with a 1-3/8 inch I.D. thick-walled sampler, driven using an automatic hammer in general accordance with ASTM D1586, "*Penetration Test and Split-Barrel Sampling of Soils*." The "N" value, reported in blows per foot (bpf), equals the number of blows required to drive the sampler through the last 12 inches of the 18-inch sample interval using a 140-pound hammer falling 30 inches.

Our drilling personnel prepared field boring logs during drilling operations. These field logs report drilling and sampling methods, sampling intervals, groundwater measurements and the subsurface conditions we encountered. At the conclusion of drilling, our drill crew made groundwater measurements and backfilled the borings in accordance with Kansas state regulations.

3. SITE CONDITIONS

3.1 Regional Geology

This project lies within the Smoky Hills geomorphic region of north central Kansas. Where the bedrock is exposed at the surface, the topography in this region is strongly sloped or steep, while the areas mantled by more recent deposits exhibit a relatively level or gently rolling surface. The surface soils in the northern portion of the region generally comprise wind-blown deposits of silt and clay particles (loess) as well as alluvial and terrace deposits associated with current and former river channels. The bedrock in the Smoky Hills is of Cretaceous Age and includes the Dakota Sandstone in the east, the Niobrara Chalk in the west, and the Greenhorn Limestone (occasionally referred to as the "Fencepost Limestone") in the central portion of the region.

3.2 Surface Conditions

The project site comprises the existing Salina South High School athletic track and grass-covered field. The site exhibits minimal elevation change, with less than 2 feet of elevation difference across the project area. The site is bound by East Magnolia Road to the north, the existing Salina South High School facility and parking lot to the east, athletic fields to the south, and a railroad track and residential buildings to the west.

3.3 Subsurface Conditions

Although we observed some variability, the subsurface materials we encountered within the depths of exploration generally comprised 6 inches of topsoil overlying lean to fat clay with varying amounts of sand, which are in turn underlain by clayey sand. General descriptions of the strata we encountered are presented below, while more detailed subsurface information is presented on the boring logs located in Appendix B. Please note that the indicated depths are relative to the site grade at the time of our exploration.

Stratum 1

We encountered lean to fat clay with varying amounts of sand in each of our soil borings, underlying the surficial topsoil at the surface, and extending to the termination depths of approximately 10 feet below the current site grade in the athletic field borings (B-1 to B-7), and to depths between 8.5 and 13.5 feet in the structure borings (B-8 to B-11). This material was generally described as shades of dark to light brown and moist to very moist. We measured Standard Penetration Test (SPT) N-values between 8 and 24 blows per foot (bpf), indicating the clay soils are in a medium stiff to very stiff condition.

Stratum 2

We encountered clayey sand in each of the structure borings (B-8 to B-11), underlying the clay materials, and extending to the boring termination depths of 15 feet below the site grade at the time of our exploration. This material was generally described as brown to light brown and moist to very moist. We measured SPT N-values between 3 and 7 bpf, indicating the sand soils are in a very loose to loose condition.

Stratum 3

We encountered an isolated layer of clayey gravel fill interbedded with the clay soils in Boring B-9 between approximately 2.5 and 4 feet below the current site grade. This material was generally described as gray and moist. We measured an SPT N-value of 6 bpf, indicating the clayey gravel fill is in a loose condition.

3.4 Groundwater Conditions

Our drill crew made water level observations during drilling and after completion of the borings to evaluate groundwater conditions. We did not encounter groundwater in any of our soil borings. However, the slow percolation rate of the on-site fat clay can cause water to pond or become perched for extended time periods. In addition, the clay in this vicinity can contain thin sand lenses or desiccation cracks that can transport water laterally. Excavations that encounter the sand seams or desiccation cracks may flood and require dewatering.

The groundwater conditions we observed during our exploration program should not be construed to represent an absolute or permanent condition. Uncertainty is involved with short-term water level observations in boreholes.

The free groundwater surface or groundwater table within unconfined aquifers is generally a subdued reflection of surface topography. Water generally flows downward from upland positions (recharge zones) to low lying areas or surface water bodies (discharge zones). As such, the groundwater level and the amount and level of any perched water on the site may be expected to fluctuate with variations in precipitation, site grading, drainage and adjacent land use. Long-term monitoring utilizing piezometers or observation wells is required to evaluate the potential range of groundwater conditions.

3.5 Seismic Site Classification

We have reviewed the boring logs and laboratory test data for this project. We have also reviewed other geologic data from the general area available to us for further information on the soils extending to a depth of 100 feet below the existing grade.

Based on the above resources, we estimate that the weighted average N-value for soil and rock across this depth is greater than 15 but less than 50 blows per foot (bpf). As defined in ASCE 7-16 as well as the 2018 version of the International Building Code, this building site is assigned a Site Class of D.

4. LABORATORY TESTING

Our engineering staff reviewed the field boring logs to outline the depth, thickness and extent of the soil strata. The samples taken from the borings were examined in our laboratory and visually classified in general accordance with ASTM D2488, "*Description and Identification of Soils (Visual-Manual Procedure)*." We established a testing program to evaluate the engineering properties of the recovered samples. A UES technician performed laboratory testing in general accordance with the following current ASTM test methods:

- Moisture Content (ASTM D2216, "*Laboratory Determination of Water (Moisture) Content of Soil and Rock*")
- Atterberg Limits (ASTM D4318, "*Liquid Limit, Plastic Limit, and Plasticity Index of Soils*")

Laboratory test results are presented on the boring logs in Appendix B and tabulated in Appendix C.

Moisture content tests were used to evaluate the existing moisture condition of the soils. The Atterberg limits were used to help classify the soils under the Unified Soils Classification System and to evaluate the plasticity characteristics of the soils.

The following data summarize our laboratory test results. We used these data to develop the allowable bearing values, anticipated settlements, and other geotechnical design criteria for the project.

- Natural Moisture Content ..... 10.2 to 33.9%
- Liquid Limit..... 43 to 61
- Plastic Limit ..... 16 to 21
- Plasticity Index ..... 23 to 41
- Standard Penetration Test (SPT 'N' blows per foot)..... 3 to 24

Based on the results of this testing program, we reviewed and supplemented the field logs to arrive at the final logs as presented in Appendix B. The final logs represent our interpretation of the field logs and reflect the additional information obtained from the laboratory testing. Stratification boundaries indicated on the boring logs were based on observations made during drilling, an extrapolation of information obtained by evaluating samples from the borings, and comparisons of similar engineering characteristics. Locations of these boundaries are approximate and the transitions between soil types may be gradual rather than clearly defined.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 General Geotechnical Considerations

The soils we encountered in the test borings are generally capable of supporting the anticipated loads on shallow foundations after soil improvements as discussed later in this report. We did not encounter groundwater within the depth of expected excavation.

The near-surface clay soils we encountered at the site are classified as moderately to highly plastic and may be susceptible to changes in strength and volume (shrink/swell) with changes in moisture content. These soils are not recommended for direct support of floor slabs or artificial turf, unless chemically stabilized as outlined later in this report.

5.2 Earthwork

5.2.1 Site Preparation

We recommend that any existing utilities within the proposed building area be relocated to avoid passing beneath the new structures. Abandoned utility pipes that cannot be removed must be plugged with grout to reduce the potential for future collapse or moisture migration into the subgrade soils. Excavations resulting from utility removal must be replaced with engineered structural fill as outlined in Section 5.2.6.

Trees within the areas to be prepared for development must be removed. The root-balls and surrounding soils containing observable organic material must also be removed. We expect the root-balls will extend to substantially greater depths than the topsoil stripping depth. The root-ball excavations must be filled with an engineered structural fill that is placed, moisture conditioned and compacted in accordance with Section 5.2.5.

In preparing the site for construction, surface vegetation and topsoil containing a significant percentage of organic matter should be removed from the areas beneath structures and any other areas that are to be paved, cut or receive fill. The removal depth for this site is expected to be approximately 6 inches. However, the removal depth should be monitored during stripping and adjusted as required. This material should either be removed from the site or stockpiled for later use in landscaping of unpaved or non-structural areas.

Prior to fill placement, the top 9 inches of the ground surface in fill areas should be scarified, moisture conditioned and recompacted in accordance with Section 5.2.5 to eliminate a plane of weakness along the contact surface.

The subgrade should be proof rolled with a loaded tandem axle dump truck or equivalent (loaded water truck, loaded concrete mixer or motor grader with a minimum weight of 20 tons). A proof-roll is considered acceptable if no ruts greater than one inch deep appear behind the loaded vehicle, and no pumping or weaving is observed as the wheels pass over the area. Any soft or unsuitable areas should be compacted or removed and replaced with stable fill material similar in composition to the surrounding soils. If necessary, clean materials such as crushed concrete or crushed stone may be used to stabilize areas where wet soil or water is present. Geogrid or structural geotextile may be used in conjunction with crushed concrete or stone to provide additional stabilization.

Whether in cut or fill, the final subgrade surface must be maintained in a stable condition at the moisture content and level of compaction identified in Section 5.2.5. Verification and maintenance of the completed subgrade may require scarification, moisture conditioning, recompaction, and proof rolling.

5.2.2 General Structural Fill

General structural fill may be used for mass site grading, landscaping applications or as utility trench backfill outside of building areas. General structural fill may also be used to within 18 inches of the base of any granular cushion beneath floor slabs and to within 16 inches of the base of the artificial turf field. In the former applications, low volume change materials are required immediately below the floor slabs or artificial turf (low volume change material is discussed in the following section).

Granular materials could be used as general structural fill but may present a higher potential for shrink/swell of the underlying expansive clay. If granular material is selected, it should be well graded, have a maximum particle size of 1.5 inches, and meet KDOT freeze/thaw durability and sulfate soundness requirements. Where granular materials are placed over less permeable or expansive soils, they should be constructed with edge drains or other drainage methods to prevent the ponding or collection of water in the granular layer.

Off-site material used as general structural fill should have a liquid limit (LL) of less than 50 and a plastic index (PI) of less than 30.

If free of organic matter or debris, the on-site soils may be reused as general structural fill within the areas outlined above.

5.2.3 Low Volume Change Material (LVC)

Low volume change (LVC) material as specified for use below floor slabs and pavements must consist of granular material or cohesive soil with a liquid limit (LL) less than 40 and a plasticity index (PI) between 10 and 20.

Granular material could be used as LVC but may retain or pond water on the underlying expansive clay and present a higher potential for volume changes due to shrink and swell. If granular material is selected, it must have sufficient cohesion to form a compactable, uniform, and stable subgrade. This typically translates to a material with greater than 15 percent fines (percent passing the No. 200 sieve) and a maximum particle size of 1.5 inches. Silty gravel (such as KDOT AB-3), crushed concrete with a maximum particle size of 1.5 inches, or limestone screenings are also acceptable LVC materials. Granular materials with less than 15 percent fines may be used within confined areas such as within foundation stem walls. LVC materials should be free of organic matter or debris.

If granular materials are used as LVC and are placed over less permeable or expansive soils, they should be constructed with edge drains or other drainage methods to prevent the ponding or collection of water in the granular layer.

The on-site moderately to highly plastic clay soils are not considered LVC material as defined in this section, unless chemically stabilized as outlined below.

5.2.4 Chemical Stabilization of Soil

The moderately to highly plastic clay soils we encountered in this exploration are considered moisture sensitive and may lose strength and undergo volume changes with fluctuations in moisture content. The on-site moderate plastic to fat clay soils are not suitable for use as LVC material without chemical stabilization. Chemical stabilization may be achieved by amending the soil with 14 to 16 percent class "C" fly ash, 6 to 8 percent cement kiln dust (CKD), or 3 to 5 percent Portland cement.

We recommend a laboratory standard Proctor Moisture-Density Relationship (ASTM D698, *"Laboratory Compaction Characteristics of Soil Using Standard Effort"*) be performed prior to field mixing using a sample of the soil to be stabilized and the proposed amendment (fly ash, CKD or Portland cement). The sample should be prepared in advance to match the intended field mix proportions, using the same amendment source as will be utilized in the field.

Fly Ash Stabilization

Prior to the introduction of fly ash, the soil material should be thoroughly pulverized to reduce clods to ½ inch or less. During the pulverization process, we recommend that water be added to reach a moisture content at or above the optimum moisture content as determined by ASTM D698 for the proposed fly ash-soil mixture. The fly ash should remain dry and be protected from external sources of moisture during transportation and storage. Fly ash material that is introduced to moisture prior to incorporation with the soil must be discarded.

The fly ash and soil should be thoroughly mixed within ½ hour after introduction. The moisture content should be field tested immediately following mixing and adjusted as needed to maintain a range between optimum and 4 percent above optimum. The fly ash-soil mixture should not be allowed to air dry. If the moisture content is determined to be in excess of 4 percent of optimum, additional fly ash should be applied to achieve the specified moisture content. Compaction of the fly ash supplemented soil should be completed within 2 hours after incorporation. Additional compaction after 2 hours may cause degradation of the soil strength. The fly ash-soil mixture should be compacted as noted in Section 5.2.5.

Fly ash mixing should not be performed at ambient air temperatures below 50 degrees Fahrenheit.

Cement Kiln Dust

Cement kiln dust can also be used as a soil stabilization agent and should be incorporated into the soils using the procedures outlined for fly ash stabilization. Cement kiln dust may be used at temperatures below 50 degrees Fahrenheit, provided the soil to be amended is frost-free.

Portland Cement

Type I/II Portland cement can be used as a soil stabilization agent using dry application methods as outlined above, or by injection of a liquefied cementitious mixture (A.K.A. Super Slurry) into the soil to be treated. Cement treatment and mixing can be performed at temperatures below 50 degrees Fahrenheit, provided the soil to be amended is frost-free.

Stabilized Subgrade Maintenance

Stabilized soil that will be utilized as floor slab or turf subgrade should not be allowed to freeze prior to floor slab or artificial turf drainage layer placement. If slab or turf material placement does not immediately follow soil stabilization, the supplemented soil should be protected from extreme weather, kept moist, and minimally trafficked until slab or turf placement occurs.

If the stabilized subgrade deteriorates prior slab or turf drainage layer placement, we recommend any unstable areas be scarified and recompacted. We recommend an additional 3 percent class "C" fly ash be incorporated in areas that are to be scarified and recompacted. Expansive soils stabilized with cement kiln dust or Portland cement may be reworked without additional amendment. Other soil types may require the incorporation of additional cement kiln dust or Portland cement to restore the desired strength characteristics.

5.2.5 Compaction of Engineered Structural Fills

Unless otherwise noted, fill materials should be placed in loose lifts not to exceed 9 inches and be compacted to a minimum of 95 percent of the maximum dry unit weight obtained from ASTM D698 (Standard Proctor). Moisture content at the time of compaction should be controlled to between optimum and 4 percent above optimum moisture content.

Granular fill materials which produce a definable moisture-density curve when tested according to ASTM D698 should be compacted to a minimum of 95 percent of the maximum dry unit weight obtained from ASTM D698. Granular fill materials which do not produce a definable moisture-density curve should be compacted to a minimum of 75 percent relative density (ASTM D4253, *"Maximum Index Density and Unit Weight of Soils Using a Vibratory Table"* and ASTM D4254, "*Minimum Index Density and Unit Weight of Soils and Calculation of Relative Density"*). Granular materials should be placed at a moisture content that will achieve the desired densities. Please note that relative density and standard Proctor tests measure different parameters and are not interchangeable.

In general, proper compaction of cohesive soils can be achieved with sheepsfoot or pneumatic-type compactors, while compaction of granular soils can be achieved with smooth-drum or smooth-plate vibratory compactors. Water flooding is not an acceptable compaction method for any soil type.

5.2.6 Utility Trench Backfill

As a minimum, utility trench backfill material should meet the requirements of general structural fill as defined in Section 5.2.2. Where utility trenches pass beneath the structure, the upper foot of utility backfill should meet the requirements of LVC material as defined in Section 5.2.3. Backfill soils in utility trenches must be placed in lifts of 6 inches or less in loose thickness and be compacted in accordance with Section 5.2.5.

Granular material could be used as utility trench backfill but may retain or pond water on the underlying expansive clay and present a higher potential for volume changes due to shrink and swell. We recommend that where utility trenches pass beneath the structures, that the use of granular backfill be limited to avoid creating a preferential pathway to the underlying expansive soils. We recommend that clay materials meeting the specifications of LVC material as specified in Section 5.2.3 or flowable fill as described in the following paragraph be used to backfill or plug utility penetrations beneath the structures.

Controlled low strength material (CLSM) or flowable fill may also be used for utility backfills. We recommend designing flowable fill with a compressive strength between 50 and 300 pounds per square inch (psi). CLSM with a maximum compressive strength less than 300 psi can be readily excavated with a backhoe. The intent for the CLSM is to provide a backfill that can be placed in a single lift, without personnel entering the excavation and without the need for compaction equipment.

Where used beneath flatwork or the structures, CLSM should be terminated a minimum of one foot below the structure, or floor slab subgrade elevation. To provide uniform support beneath flatwork, and the structures, the fill placed over the CLSM should be of similar composition as the surrounding bearing materials and be constructed as moisture-conditioned and compacted engineered structural fill in accordance with Section 5.2.5.

5.2.7 Foundation Backfill

As a minimum, backfill soils for formed foundations should meet the requirements of general structural fill as defined in Section 5.2.2. However, we recommend fill around foundations meet the requirements of LVC material as defined in Section 5.2.3. The use of LVC material to backfill foundations is intended to help reduce lateral swell pressures on the foundation wall and reduce desiccation cracking adjacent to the structure, which can provide a pathway for water to infiltrate the foundation subgrade. If other cohesive materials are used to backfill foundations, the risk of differential movements caused by water infiltration into the foundation subgrade may be increased.

We also recommend the upper 18 inches of exterior foundation backfill have sufficient cohesion to direct surface water away from the structure. Granular materials such as sand and gravel are not suitable for use as exterior foundation backfill in the surficial 18 inches.

Backfill soils around formed foundations must be placed in lifts of 6 inches or less in loose thickness and be moisture conditioned and compacted in accordance with Section 5.2.5. Care should be exercised during

compaction to avoid applying excessive stress to the foundation surfaces. Where both sides of a foundation wall are backfilled, the fill should be placed simultaneously in uniform lifts on both sides of the wall to reduce unbalanced lateral loads.

5.2.8 Correction of Unsuitable Foundation Soils

If soft, loose, or otherwise unsuitable soils are encountered at the base of any foundations, an over-excavation and replacement/recompaction procedure will be required. The unsuitable soils beneath the foundations should be removed to the required depth, with the excavation extending laterally 9 inches in all directions for each vertical foot of over-excavation. Structural fill for the over-excavated areas should be of similar composition as the surrounding materials or meet the requirements of LVC material as defined in Section 5.2.3. Backfill material should be compacted in accordance with Section 5.2.5. CLSM, as defined in Section 5.2.6 may also be used to backfill over-excavated areas.

5.2.9 Excavation Slopes

Vertical cuts and excavations may stand for short periods of time but should not be considered stable in any case. All excavations should be sloped back, shored, or shielded for the protection of workers. As a minimum, trenching and excavation activities should conform to federal and local regulations.

The clay soils with varying amounts of sand we encountered in the test borings generally classify as a type "B" soil according to OSHA's Construction Standards for Excavations. In general, the maximum allowable slope for shallow excavations of less than 20 feet in a type "B" soil is 1.0H:1.0V, although other provisions and restrictions may apply. If different soil types are encountered, the maximum allowable slope may be different.

The Contractor is responsible for designing any excavation slopes or temporary shoring. The Contractor must also be aware that slope height, slope inclination, and excavation depths (including utility trench excavations) should in no case exceed those specified in federal, state, or local safety regulations, such as OSHA Health and Safety Standards for Excavations, 29 CFR Part 1926, or successor regulations.

The information presented in this section is solely for our client's reference. **UES assumes no responsibility for site safety or the implementation of proper excavation techniques.**

5.3 Shallow Building Foundations

Based on the subsurface conditions revealed by the boring and testing program, this site appears suitable for use of a shallow foundation system. The selection of an allowable soil bearing pressure for shallow foundation elements must fulfill two requirements. First, the foundation load must be sufficiently less than the ultimate soil bearing capacity to ensure stability. Second, the total and differential settlements must not exceed amounts which will produce adverse behavior of the superstructure.

In order to meet the previous criteria, we have explored both the bearing capacity and the load settlement characteristics of the subsurface materials. The allowable soil bearing pressure is based on a factor of safety of three against the ultimate bearing capacity of the soil, with additional consideration given to limiting settlement to acceptable levels. In our analysis, we used a maximum allowable total vertical movement of 1 inch and a maximum allowable differential vertical movement of ¾ of an inch within 25 linear feet. These limits are generally considered acceptable for most structures.

A net allowable soil bearing pressure of 2,500 pounds per square foot (psf) may be used to size shallow foundation elements bearing on the native clay soils. The allowable bearing pressure is expressed in terms of the net pressure transferred to the soil. The net allowable bearing pressure is defined as the total structural dead load including the weight of the foundation elements, less the weight of the soil excavated for the foundation elements. This value may be increased by one-third for transient loading conditions such as wind or seismic forces.

This site appears to be suitable for the use of trenched "grade beam" type footings. Trenched footings utilize the excavation side walls as a form. Because separate forms do not need to be installed, this type of footing can be constructed more quickly and eliminate the need to backfill the foundation. Stresses applied to the soil by the foundation are also distributed more evenly.

All exterior and any interior foundation elements exposed to freezing conditions should be constructed at least 3 feet below the surrounding exterior grade to help reduce the effects of frost and seasonal moisture changes. Deeper foundation embedment will reduce the potential for moisture fluctuations and soil shrink and swell below the foundations. We recommend the foundations be designed with minimum sustained soil pressures of 1,500 psf to limit soil swell. If foundations with a minimum of 1,500 psf sustained soil pressure are not practical, we recommend that the exterior foundations be embedded a minimum of 4 feet below the final exterior grades. Interior footings, which will be protected from the effects of frost and moisture fluctuations, may be founded 1.5 feet below finished floor elevation.

We recommend that concrete be placed as soon as practical after footing excavation, with as little disturbance to the bearing soil as possible. Footing excavations should be free of loose soil or debris. Loose or disturbed soil must be removed or compacted prior to foundation construction. Water that collects in the excavations should be promptly removed to prevent softening of the foundation supporting soils prior to concrete placement. In addition, we recommend all excavations be observed by our geotechnical personnel prior to placement of concrete for the possible presence of unsuitable bearing soils. If unsuitable bearing soils are encountered during construction, these areas should be corrected in accordance with Section 5.2.8.

If shallow foundations are designed and constructed in accordance with the recommendations presented, total vertical movements are not expected to exceed 1 inch with differential vertical movements less than ¾ of an inch within 25 linear feet.

5.4 Floor Slabs & Slab-on-Grade Supported Structures

The lean to fat clay soils we encountered near the surface in our borings are moderately to highly plastic and susceptible to changes in strength and volume (shrink/swell) with changes in moisture content. Such changes present a risk of causing slab movement. Most slabs-on-grade will experience some amount of vertical movement, which the Owner must be willing to accept. Recommendations to help reduce the risk of movement of a slab supported on plastic clay soils are presented below.

To provide uniform support for slabs-on-grade and reduce the potential for subgrade volume change, we recommend all floor slabs and at-grade supported structures bear on a minimum of 18 inches of LVC material as defined in Section 5.2.3 (or chemically stabilized on-site soils as outlined in Section 5.2.4). The placement and compaction of the LVC material should conform to the recommendations in Section 5.2.5 of this report. Depending on final grades, some over-excavation of the plastic fat clay soils may be required to develop the 18-inch layer of LVC material.

A modulus of subgrade reaction of 100 pounds per square inch per inch (pci) may be used to evaluate deflections of slabs underlain by a minimum of 18 inches of LVC. Please contact us for further recommendations if a stiffer subgrade is required.

By constructing an 18-inch layer of low plasticity, low volume change material immediately beneath the slabs-on-grade and closely controlling the moisture and density of the scarified soil and new fill materials, it is our opinion that the potential for detrimental slab movement will be sufficiently reduced. However,

because of the remaining thickness of the moderately or highly plastic soils, the potential for future movement will still exist. A greater thickness of low volume change material beneath slabs may further reduce potential slab movement. If even slight slab movements are not acceptable, please contact UES for further floor slab recommendations.

We recommend a 2- to 4-inch-thick granular cushion be placed beneath the slabs-on-grade in addition to the low plasticity, low volume change material. This layer should be free-draining, well-graded and compacted by vibration prior to placing the floor slab.

We also recommend the moisture content of the upper 9 inches of the subgrade be checked prior to placement of a granular base, reinforcing steel or concrete slab. If the moisture content of the subgrade is below optimum, we recommend the subgrade be scarified, moisture conditioned and recompacted according to Section 5.2.5.

In many construction projects, the moisture content of the slab subgrade is tested during grading of the site. The subgrade then remains exposed until slab placement occurs several weeks later. In this situation, even LVC material is subject to some swell movement if not properly moisture conditioned prior to slab placement. Periodic applications of water will help maintain the proper moisture content of subgrade soils. The risk of differential movements can be reduced by creating and properly preparing a LVC zone beneath the slab as well as ensuring proper drainage is maintained around the structure at all times.

In finished areas, the floor covering manufacturer should be consulted regarding the use of a vapor retarder beneath floor slabs. If a vapor retarder is recommended by the floor covering manufacturer, it should conform to the manufacturer's specifications to maintain the product warranty. In other areas, vapor retarder should be placed in accordance with recommendations outlined in ACI 302.1R-15, "Guide to Concrete Floor and Slab Construction."

5.5 Artificial Turf Recommendations

The performance of the new artificial turf field is directly affected by the degree of compaction, uniformity, and stability of the soil subgrade beneath the granular subbase.

The fat clay soils we encountered in our explorations are not suitable for direct support of the synthetic turf systems. Suitable support could be achieved by over-excavation and replacement of the fat clay soils with low volume change (LVC) material. However, given the large coverage of the proposed synthetic turf, we

anticipate over-excavation and replacement will be cost prohibitive. In addition, some LVC materials (typically sandy soils) may limit the effectiveness of the turf subdrains and may allow water to accumulate on the contact surface with the lower permeability fat clay soils.

Based on the above considerations, we recommend the proposed synthetic turf fields be supported on a minimum of 16 inches of LVC material as defined in Section 5.2.3. The 16-inch LVC layer should include 8 inches of turf drainage layer overlying 8 inches of native soils chemically stabilized in place as outlined in Section 5.2.4.

The service life of the new field can be reduced if the turf system is constructed on a poor subgrade. We emphasize the importance of preparing the subgrade in accordance with the procedures listed in the previous sections of this report.

Drainage of surface and subsurface water is also a critical component of the subgrade performance. Wetting of the subgrade soils will cause loss of support strength resulting in premature distress. Surface and subsurface drainage should be provided to remove all water that may enter the turf subbase, including edge drains for the granular layer.

5.6 Lateral Earth Pressures

Earth-retaining structures should be designed to withstand lateral earth pressures caused by adjacent soil and applied surcharge loads. The magnitude of the lateral earth pressure will depend on the height of the walls, stiffness of the walls, magnitude of the surcharge loads behind the walls, and the backfill and existing soil conditions behind the walls.

Table 5.6-1: Lateral Earth Pressure Coefficients

Soil Type (USCS Symbol)	Wet Unit Weight (pcf)	Drained Friction Angle (Φ')	At Rest (K_o)	Active (K_a)	Passive (K_p)
CL to CH w/ Varying Sand	125	24	0.59	0.42	2.37
Granular Backfill* (SP, SW)	115	32	0.47	0.31	3.25
Granular Backfill* (GP, GW)	125	35	0.43	0.27	3.69

Values for material compacted in accordance with Section 5.2.5

The values provided above are empirical and are based on basic testing as well as our experience with similar materials. These values also assume a vertical wall with a horizontal retained surface behind the wall. Lateral earth pressure parameters for granular backfill may be used only if the granular backfill extends upward from the heel of the wall at a slope shallower than 1.0H:1.0V. Please contact us if different backfill materials or wall geometries are a consideration for this project.

Static surcharge loads imposed on below-grade walls may be computed by multiplying the static surcharge load (q) by the appropriate lateral earth pressure coefficient (K_a or K_o). Appropriate factors of safety should be applied to the computed lateral earth pressures.

5.7 Surface Drainage and Landscaping

The success of the shallow foundation system, slab-on-grade systems, and artificial turf field is contingent upon keeping the moisture content of subgrade soils as constant as possible and not allowing surface drainage to have a path to the subsurface soils. Positive surface drainage away from structures must be maintained throughout the life of the structures. Landscaped areas should be designed and constructed such that irrigation and other surface water will be collected and carried away from foundation elements. Pavements should be sloped or crowned to direct surface water to storm sewer systems or detention/retention ponds.

During construction, temporary grades should be established to prevent runoff from entering excavations or footing trenches. Backfill should be placed as soon as concrete structural strength requirements are met and should be graded to drain away from the building.

The final grade of the foundation backfill and any overlying pavements should have a positive slope away from foundation walls on all sides. We typically recommend a minimum slope of one inch per foot for the first 5 to 10 feet for uncovered surfaces. However, the slope may be decreased if the ground surface adjacent to foundations is covered with concrete slabs or asphalt pavements. For other areas of the site, we recommend a minimum slope of two percent. Pavements and exterior slabs that abut structures should be carefully sealed against moisture intrusion at the joint. All downspouts and faucets should discharge onto splash blocks that extend at least five feet from the building line or be tied into the storm drain system. Splash blocks should slope away from the foundation walls.

The placement of vegetation and plantings next to the foundation should be minimized. Where landscaping is required, we recommend considering plants and vegetation that require minimal irrigation. Irrigation within ten feet of the foundation should be carefully controlled and minimized.

5.8 Construction Considerations

If construction of the project is to be performed during periods of freezing temperatures, steps should be taken to prevent the soils under slabs-on-grade, footings, and any turf from freezing. In no case should the fill materials, slabs, foundations, artificial turf, or other exterior flat work be placed on frozen or partially frozen materials. Frozen materials should be removed and replaced with a suitable material as described in earlier sections of this report.

Construction performed during periods of high precipitation may result in saturated unstable soils, and caving or sloughing of excavations. Control of soil moisture will be necessary for successful soil compaction, and to maintain soil bearing capacity.

5.9 Construction Observation and Quality Assurance

We recommend that UES review those portions of the plans and specifications that pertain to foundations and earthwork to evaluate consistency with our findings and recommendations. UES will provide up to 2 hours of engineering support services at no charge to review project documents for adherence to our recommendations.

Site grading, including proof-rolling, replacement or recompaction of material, and placement of fill and backfill, should be observed by a quality assurance technician from UES under the direction of a registered professional engineer. The technician should perform density tests and make any other observations necessary to assure that the requirements of the specifications are being achieved.

It is the opinion of UES that construction observation by the geotechnical engineer of record or his designated representative is necessary to complete the design process. Field observation services are viewed as essential and a continuation of the design process. Unless these services are provided by UES, the geotechnical engineer will not be responsible for improper use of our recommendations or failure by others to recognize conditions which may be detrimental to the successful completion of the project.

UES will be available to make field observations and provide consultation services as may be necessary. A written proposal outlining the cost of construction testing services such as soil, concrete, and steel quality assurance can be provided upon request.

6. CLOSING REMARKS AND LIMITATIONS

This report is presented in broad terms to provide an assessment of the subsurface conditions and their potential effect on the adequate design and economical construction of the proposed structures and artificial turf. The analyses, conclusions, and recommendations contained in this report are based on the site conditions existing at the time of the exploration, the project layout described herein, and the assumption that the information obtained from our 11 borings is representative of subsurface conditions throughout the site.

Any changes in the design or location of the proposed structure should be assumed to invalidate the conclusions and recommendations given in this report until we have had the opportunity to review the changes and, if necessary, modify our conclusions and recommendations accordingly. If subsurface conditions different from those encountered in the explorations are observed during construction or appear to be present beneath excavations, UES should be advised at once so that the conditions can be reviewed and recommendations reconsidered where necessary.

If there is a substantial lapse in time between the submission of this report and the start of construction, or if site conditions or the project layout have significantly changed (due to further development of grading plans, natural causes, or construction operations at or adjacent to the site), we recommend that this report be reviewed to determine the applicability of our previous conclusions and recommendations.

Our geotechnical exploration and subsequent recommendations address only the design and construction considerations contained in this report. We make no warranty for the contents of this report, neither expressed nor implied, except that our professional services were performed in accordance with engineering principles and practices generally accepted at this time and location.

The scope of services for this exploration did not include a wetlands evaluation, an environmental assessment, or an investigation for the presence of hazardous or toxic materials in the soil, surface water, groundwater, or air within or adjacent to this site. If contamination is suspected or is a concern, we recommend the scope of this study be expanded to include an environmental assessment.

This report was prepared by the firm of GSI Engineering, LLC (GSI) a UES Company (UES) under the supervision of a professional engineer registered in the State of Kansas. Report preparation was in accordance with generally accepted geotechnical engineering practices for the exclusive use of our client for evaluating the design of the project as it relates to the geotechnical aspects discussed herein.

Recommendations are based on the applicable standards of the profession at the time of this report within this geographic area. GSI Engineering, LLC a UES Company (UES) will not be responsible for misrepresentation of this report resulting from partial reproduction or paraphrasing of its contents.

We appreciate the opportunity to be of service on this project. Please contact us if we can provide further information regarding the contents of this report or the scope and cost of additional services.

Respectfully submitted,
GSI Engineering, LLC a UES Company (UES)

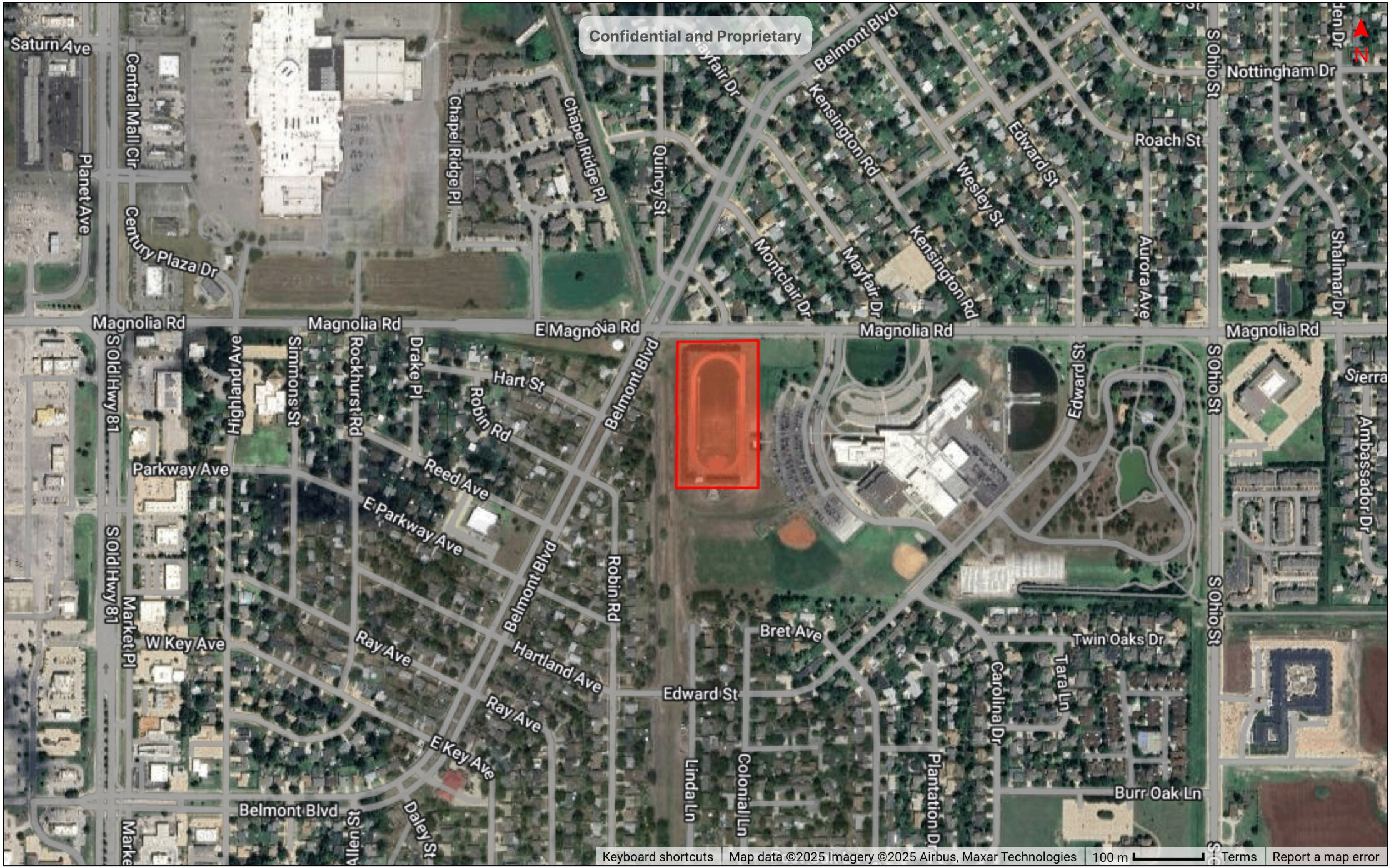
Kaleb A. Meyer I.G.
Assistant Geotechnical Manager

Colin D. Parker, P.E.
Project Geotechnical Engineer

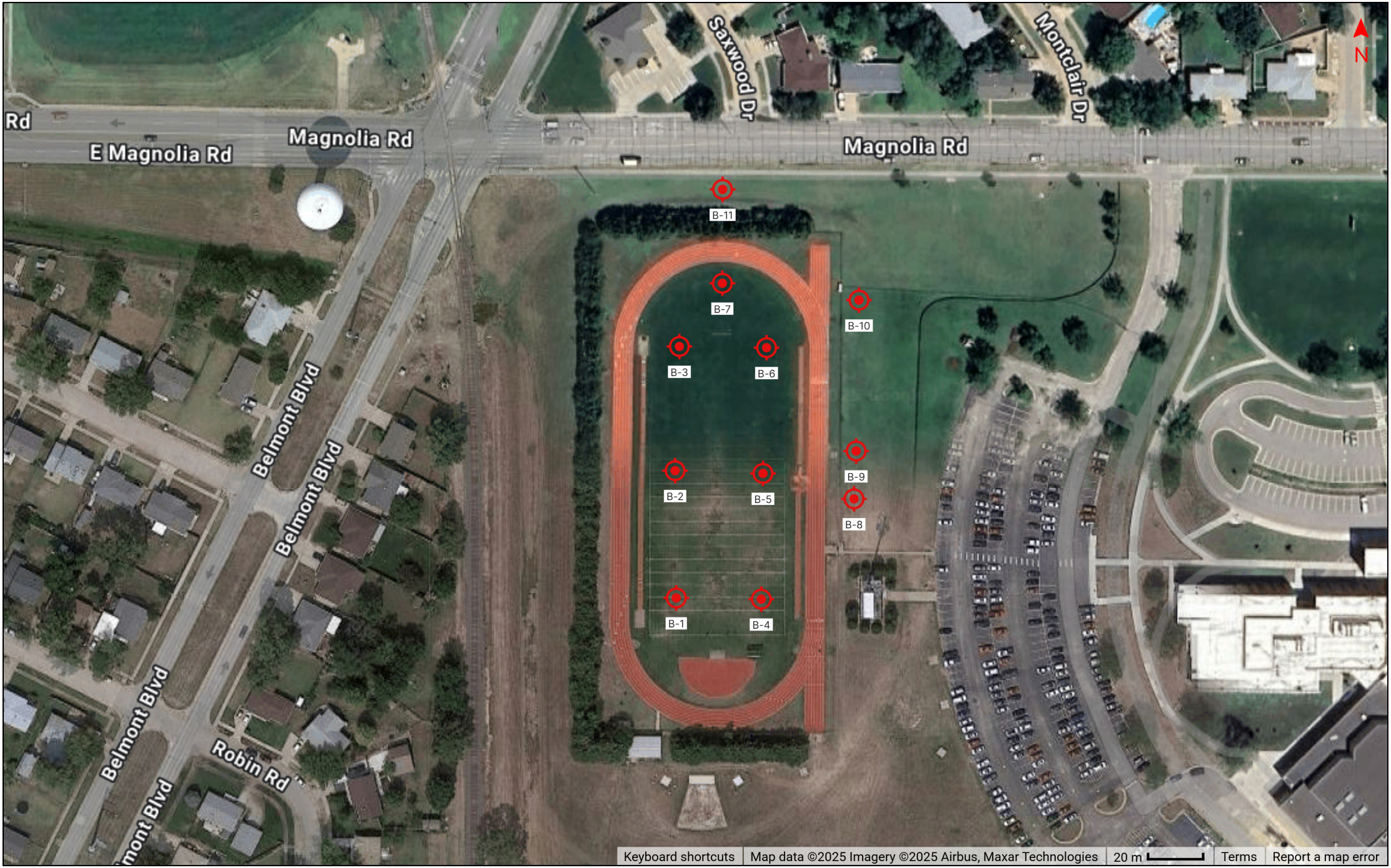
KAM/CDP

APPENDIX A

General Vicinity Map
Boring Location Plan



UES	**PREPARED BY** GSI Engineering, LLC a UES Company Wichita, Kansas	**PROJECT** Name: SHS Stadium Improvements Number: A24125.00993.000	**LOCATION** 730 East Magnolia Road Salina, Kansas Salina, KS	**SYMBOL KEY** Soil Boring Site Location



UES™	**PREPARED BY** GSI Engineering, LLC a UES Company Wichita, Kansas	**PROJECT** Name: SHS Stadium Improvements Number: A24125.00993.000	**LOCATION** 730 East Magnolia Road Salina, Kansas Salina, KS	**SYMBOL KEY** Soil Boring

APPENDIX B

Boring Logs
Keys to Symbols
Legend & Nomenclature
Unified Soil Classification System (USCS)

SHS Stadium Improvements

730 East Magnolia Road, Salina, Kansas

Project No.: A24125.00993.000

Soil Boring: B-1

Sheet 1 of 1

DRILLING FIRM: UES	**DATE COMPLETED:** 12/04/2024	**REMARKS:** -
DRILLER: BNC	**DEPTH:** 10'	
LOGGED BY: EC	**SURFACE ELEVATION:** 1238'	
RIG TYPE: CME 45	**ELEVATION DATUM:** WGS84	
HAMMER TYPE: Auto	**GEOLOGY:** Smoky Hills	**GWT (ATD):** N.E. **GWT (AD):** N.E.
METHOD: 4-inch Diameter Continuous Flight Augers	**COORDINATES:** 38.796519, -97.602775	

Depth (ft)	Sample Graphic	Samples: Sample Number	Samples: Uncorrected N-Value	Samples: Recovery / RQD	Graphic Log	Soil Description and Remarks	USCS	Laboratory Results: Moisture Content (%)	Laboratory Results: Wet Density (pcf)	Laboratory Results: Compressive Strength (ksf)	Laboratory Results: Fines Content (%)	Laboratory Results: Atterberg Limits (LL-PL-PI)	Elevation (ft)
		S-1	11			TOPSOIL 0.5 FAT CLAY - dark brown, moist, stiff, trace roots		23.4				61-20-41	
		S-2	12			- very moist, trace gypsum, else as above 5.0		26.7					1235
5		S-3	12			FAT CLAY with SAND - brown, moist, stiff, trace gypsum 8.5	CH	21.1					1230
10		S-4	11			FAT CLAY - brown, very moist, stiff, trace gravel 10.0							

End of boring at 10'

FIGURE B-1

SHS Stadium Improvements
730 East Magnolia Road, Salina, Kansas
A24125.00993.000 | 01/25

SHS Stadium Improvements

730 East Magnolia Road, Salina, Kansas

Project No.: A24125.00993.000

Soil Boring: B-2

Sheet 1 of 1

DRILLING FIRM: UES	**DATE COMPLETED:** 12/04/2024	**REMARKS:** -
DRILLER: BNC	**DEPTH:** 10'	
LOGGED BY: EC	**SURFACE ELEVATION:** 1238'	
RIG TYPE: CME 45	**ELEVATION DATUM:** WGS84	**GWT (ATD):** N/A **GWT (AD):** N/A
HAMMER TYPE: Auto	**GEOLOGY:** Smoky Hills	
METHOD: 4-inch Diameter Continuous Flight Augers	**COORDINATES:** 38.796934, -97.60278	

Depth (ft)	Sample Graphic	Samples: Sample Number	Samples: Uncorrected N-Value	Samples: Recovery / RQD	Graphic Log	Soil Description and Remarks	USCS	Laboratory Results: Moisture Content (%)	Laboratory Results: Wet Density (pcf)	Laboratory Results: Compressive Strength (ksf)	Laboratory Results: Fines Content (%)	Laboratory Results: Atterberg Limits (LL-PL-PI)	Elevation (ft)
		S-1	9			TOPSOIL 0.5		21.6					
		S-2	12			FAT CLAY - dark brown, moist, stiff, trace sand and roots - very moist, no sand, trace roots, else as above 5.0		26.8				61-21-40	1235
5		S-3	15			FAT CLAY - brown, moist, stiff, trace sand and roots	CH	24.8					1230
10		S-4	10			- as above 10.0							

End of boring at 10'

FIGURE B-2

SHS Stadium Improvements
730 East Magnolia Road, Salina, Kansas
A24125.00993.000 | 01/25

SHS Stadium Improvements

730 East Magnolia Road, Salina, Kansas

Project No.: A24125.00993.000

Soil Boring: B-3

Sheet 1 of 1

DRILLING FIRM: UES	**DATE COMPLETED:** 12/04/2024	**REMARKS:** -
DRILLER: BNC	**DEPTH:** 10'	
LOGGED BY: EC	**SURFACE ELEVATION:** 1237'	
RIG TYPE: CME 45	**ELEVATION DATUM:** WGS84	**GWT (ATD):** N/A **GWT (AD):** N/A
HAMMER TYPE: Auto	**GEOLOGY:** Smoky Hills	
METHOD: 4-inch Diameter Continuous Flight Augers	**COORDINATES:** 38.797339, -97.602762	

Depth (ft)	Sample Graphic	Samples: Sample Number	Samples: Uncorrected N-Value	Samples: Recovery / RQD	Graphic Log	Soil Description and Remarks	USCS	Laboratory Results: Moisture Content (%)	Laboratory Results: Wet Density (pcf)	Laboratory Results: Compressive Strength (ksf)	Laboratory Results: Fines Content (%)	Laboratory Results: Atterberg Limits (LL-PL-PI)	Elevation (ft)
		S-1	10			TOPSOIL 0.5 FAT CLAY - dark brown, very moist, stiff, trace roots 2.5		26.2					1235
5		S-2	12			FAT CLAY - brown, moist, stiff, trace sand, roots, and gypsum	CH	23.5					
		S-3	13			- as above		22.0					1230
10		S-4	12			- no gypsum, else as above 10.0							

End of boring at 10'

FIGURE B-3

SHS Stadium Improvements
730 East Magnolia Road, Salina, Kansas
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SHS Stadium Improvements

730 East Magnolia Road, Salina, Kansas

Project No.: A24125.00993.000

Soil Boring: B-4

Sheet 1 of 1

DRILLING FIRM: UES	**DATE COMPLETED:** 12/04/2024	**REMARKS:** -
DRILLER: BNC	**DEPTH:** 10'	
LOGGED BY: EC	**SURFACE ELEVATION:** 1238'	
RIG TYPE: CME 45	**ELEVATION DATUM:** WGS84	**GWT (ATD):** N/A **GWT (AD):** N/A
HAMMER TYPE: Auto	**GEOLOGY:** Smoky Hills	
METHOD: 4-inch Diameter Continuous Flight Augers	**COORDINATES:** 38.796515, -97.602419	

Depth (ft)	Sample Graphic	Samples: Sample Number	Samples: Uncorrected N-Value	Samples: Recovery / RQD	Graphic Log	Soil Description and Remarks	USCS	Laboratory Results: Moisture Content (%)	Laboratory Results: Wet Density (pcf)	Laboratory Results: Compressive Strength (ksf)	Laboratory Results: Fines Content (%)	Laboratory Results: Atterberg Limits (LL-PL-PI)	Elevation (ft)
		S-1	9			TOPSOIL 0.5							
						FAT CLAY - dark brown, very moist, stiff, trace sand and roots 2.5		26.8					1235
		S-2	15			FAT CLAY - brown, moist, stiff, trace sand and roots 5.0		23.1					
5		S-3	10			FAT CLAY with SAND - brown, moist, stiff 8.5	CH	20.7					1230
10		S-4	11			FAT CLAY - brown, moist, stiff 10.0							

End of boring at 10'

FIGURE B-4

SHS Stadium Improvements
730 East Magnolia Road, Salina, Kansas
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SHS Stadium Improvements

730 East Magnolia Road, Salina, Kansas

Project No.: A24125.00993.000

Soil Boring: B-5

Sheet 1 of 1

DRILLING FIRM: UES	**DATE COMPLETED:** 12/04/2024	**REMARKS:** -
DRILLER: BNC	**DEPTH:** 10'	
LOGGED BY: EC	**SURFACE ELEVATION:** 1238'	
RIG TYPE: CME 45	**ELEVATION DATUM:** WGS84	**GWT (ATD):** N/A **GWT (AD):** N/A
HAMMER TYPE: Auto	**GEOLOGY:** Smoky Hills	
METHOD: 4-inch Diameter Continuous Flight Augers	**COORDINATES:** 38.796925, -97.602412	

Depth (ft)	Sample Graphic	Samples: Sample Number	Samples: Uncorrected N-Value	Samples: Recovery / RQD	Graphic Log	Soil Description and Remarks	USCS	Laboratory Results: Moisture Content (%)	Laboratory Results: Wet Density (pcf)	Laboratory Results: Compressive Strength (ksf)	Laboratory Results: Fines Content (%)	Laboratory Results: Atterberg Limits (LL-PL-PI)	Elevation (ft)
		S-1	9			TOPSOIL 0.5							
						FAT CLAY - dark brown, very moist, stiff, trace sand and roots 2.5		26.1				54-21-33	1235
		S-2	15			FAT CLAY - brown, moist, stiff, trace sand and roots		22.8					
5		S-3	13			- no roots, trace gypsum, else as above	CH	21.4					1230
10		S-4	13			- no gypsum, trace calcium, else as above 10.0							

End of boring at 10'

FIGURE B-5

SHS Stadium Improvements
730 East Magnolia Road, Salina, Kansas
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SHS Stadium Improvements

730 East Magnolia Road, Salina, Kansas

Project No.: A24125.00993.000

Soil Boring: B-6

Sheet 1 of 1

DRILLING FIRM: UES	**DATE COMPLETED:** 12/04/2024	**REMARKS:** -
DRILLER: BNC	**DEPTH:** 10'	
LOGGED BY: EC	**SURFACE ELEVATION:** 1238'	
RIG TYPE: CME 45	**ELEVATION DATUM:** WGS84	**GWT (ATD):** N/A **GWT (AD):** N/A
HAMMER TYPE: Auto	**GEOLOGY:** Smoky Hills	
METHOD: 4-inch Diameter Continuous Flight Augers	**COORDINATES:** 38.797335, -97.602397	

Depth (ft)	Sample Graphic	Samples: Sample Number	Samples: Uncorrected N-Value	Samples: Recovery / RQD	Graphic Log	Soil Description and Remarks	USCS	Laboratory Results: Moisture Content (%)	Laboratory Results: Wet Density (pcf)	Laboratory Results: Compressive Strength (ksf)	Laboratory Results: Fines Content (%)	Laboratory Results: Atterberg Limits (LL-PL-PI)	Elevation (ft)
		S-1	10			TOPSOIL 0.5							
						FAT CLAY - dark brown, moist, stiff, trace sand and roots 2.5		24.5					1235
		S-2	17			FAT CLAY - brown, moist, very stiff, trace sand, roots, and calcium veins		23.1					
5		S-3	17			- trace calcium, else as above	CH	18.3					1230
10		S-4	13			- stiff, else as above 10.0							

End of boring at 10'

FIGURE B-6

SHS Stadium Improvements
730 East Magnolia Road, Salina, Kansas
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SHS Stadium Improvements

730 East Magnolia Road, Salina, Kansas

Project No.: A24125.00993.000

Soil Boring: B-7

Sheet 1 of 1

DRILLING FIRM: UES	**DATE COMPLETED:** 12/04/2024	**REMARKS:** -
DRILLER: BNC	**DEPTH:** 10'	
LOGGED BY: EC	**SURFACE ELEVATION:** 1238'	
RIG TYPE: CME 45	**ELEVATION DATUM:** WGS84	**GWT (ATD):** N/A **GWT (AD):** N/A
HAMMER TYPE: Auto	**GEOLOGY:** Smoky Hills	
METHOD: 4-inch Diameter Continuous Flight Augers	**COORDINATES:** 38.797545, -97.602582	

Depth (ft)	Sample Graphic	Samples: Sample Number	Samples: Uncorrected N-Value	Samples: Recovery / RQD	Graphic Log	Soil Description and Remarks	USCS	Laboratory Results: Moisture Content (%)	Laboratory Results: Wet Density (pcf)	Laboratory Results: Compressive Strength (ksf)	Laboratory Results: Fines Content (%)	Laboratory Results: Atterberg Limits (LL-PL-PI)	Elevation (ft)
		S-1	10			TOPSOIL 0.5							
						FAT CLAY - dark brown, moist, stiff, trace sand and roots		23.0				53-16-37	1235
		S-2	10			- very moist, trace calcium deposits, else as above		26.9					
5		S-3	11			- no roots, else as above	CH	25.9					1230
10		S-4	10			- moist, else as above 10.0							

End of boring at 10'

FIGURE B-7

SHS Stadium Improvements
730 East Magnolia Road, Salina, Kansas
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SHS Stadium Improvements

730 East Magnolia Road, Salina, Kansas

Project No.: A24125.00993.000

Soil Boring: B-8

Sheet 1 of 1

DRILLING FIRM: UES	**DATE COMPLETED:** 12/04/2024	**REMARKS:** -
DRILLER: BNC	**DEPTH:** 15'	
LOGGED BY: EC	**SURFACE ELEVATION:** 1238'	
RIG TYPE: CME 45	**ELEVATION DATUM:** WGS84	**GWT (ATD):** N/A **GWT (AD):** N/A
HAMMER TYPE: Auto	**GEOLOGY:** Smoky Hills	
METHOD: 4-inch Diameter Continuous Flight Augers	**COORDINATES:** 38.796842, -97.602031	

Depth (ft)	Sample Graphic	Samples: Sample Number	Samples: Uncorrected N-Value	Samples: Recovery / RQD	Graphic Log	Soil Description and Remarks	USCS	Laboratory Results: Moisture Content (%)	Laboratory Results: Wet Density (pcf)	Laboratory Results: Compressive Strength (ksf)	Laboratory Results: Fines Content (%)	Laboratory Results: Atterberg Limits (LL-PL-PI)	Elevation (ft)
		S-1	10			TOPSOIL 0.5		27.4					
		S-2	24			FAT CLAY - dark brown, very moist, stiff, trace sand and roots - moist, very stiff, trace calcium, else as above		18.9					1235
5		S-3	16			- no roots, else as above	CH						1230
10		S-4	15			FAT CLAY - brown, moist, stiff, trace sand 13.5		18.6					1225
15		S-5	3			CLAYEY SAND - light brown, moist, very loose, fine grained 15.0	SC	17.7					

End of boring at 15'

FIGURE B-8

SHS Stadium Improvements
730 East Magnolia Road, Salina, Kansas
A24125.00993.000 | 01/25

SHS Stadium Improvements

730 East Magnolia Road, Salina, Kansas

Project No.: A24125.00993.000

Soil Boring: B-9

Sheet 1 of 1

DRILLING FIRM: UES	**DATE COMPLETED:** 12/04/2024	**REMARKS:** -
DRILLER: BNC	**DEPTH:** 15'	
LOGGED BY: EC	**SURFACE ELEVATION:** 1238'	
RIG TYPE: CME 45	**ELEVATION DATUM:** WGS84	**GWT (ATD):** N/A **GWT (AD):** N/A
HAMMER TYPE: Auto	**GEOLOGY:** Smoky Hills	
METHOD: 4-inch Diameter Continuous Flight Augers	**COORDINATES:** 38.796998, -97.602022	

Depth (ft)	Sample Graphic	Samples: Sample Number	Samples: Uncorrected N-Value	Samples: Recovery / RQD	Graphic Log	Soil Description and Remarks	USCS	Laboratory Results: Moisture Content (%)	Laboratory Results: Wet Density (pcf)	Laboratory Results: Compressive Strength (ksf)	Laboratory Results: Fines Content (%)	Laboratory Results: Atterberg Limits (LL-PL-PI)	Elevation (ft)
		S-1	8			TOPSOIL 0.5							
						FAT CLAY - dark brown, moist, stiff, trace sand and roots 2.5	CH					53-20-33	1235
5		S-2	6			CLAYEY GRAVEL - gray, slightly moist, loose, trace sand 5.0	GC	10.2					
		S-3	12			FAT CLAY - light brown, moist, stiff, trace sand and calcium veins							1230
10		S-4	10			- no sand or calcium veins, else as above	CH						
						13.5							1225
15		S-5	5			CLAYEY SAND - light brown, moist, loose, fine grained 15.0	SC	19.3					

End of boring at 15'

FIGURE B-9

SHS Stadium Improvements
730 East Magnolia Road, Salina, Kansas
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SHS Stadium Improvements

730 East Magnolia Road, Salina, Kansas

Project No.: A24125.00993.000

Soil Boring: B-10

Sheet 1 of 1

DRILLING FIRM: UES	**DATE COMPLETED:** 12/04/2024	**REMARKS:** -
DRILLER: BNC	**DEPTH:** 15'	
LOGGED BY: EC	**SURFACE ELEVATION:** 1237'	
RIG TYPE: CME 45	**ELEVATION DATUM:** WGS84	**GWT (ATD):** N/A **GWT (AD):** N/A
HAMMER TYPE: Auto	**GEOLOGY:** Smoky Hills	
METHOD: 4-inch Diameter Continuous Flight Augers	**COORDINATES:** 38.79749, -97.60201	

Depth (ft)	Sample Graphic	Samples: Sample Number	Samples: Uncorrected N-Value	Samples: Recovery / RQD	Graphic Log	Soil Description and Remarks	USCS	Laboratory Results: Moisture Content (%)	Laboratory Results: Wet Density (pcf)	Laboratory Results: Compressive Strength (ksf)	Laboratory Results: Fines Content (%)	Laboratory Results: Atterberg Limits (LL-PL-PI)	Elevation (ft)
		S-1	12			TOPSOIL 0.5 LEAN CLAY - dark brown, moist, stiff, trace sand and roots		18.4				43-17-26	1235
		S-2	17			- very stiff, trace calcium deposits, else as above		17.7					
5		S-3	12			- stiff, else as above	CL						1230
10		S-4	13			- no sand, roots, or calcium deposits, else as above							1225
15		S-5	5			13.5 CLAYEY SAND - light brown, very moist, loose, trace silt, clay lense 15.0	SC	33.9					

End of boring at 15'

FIGURE B-10

SHS Stadium Improvements
730 East Magnolia Road, Salina, Kansas
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SHS Stadium Improvements

730 East Magnolia Road, Salina, Kansas

Project No.: A24125.00993.000

Soil Boring: B-11

Sheet 1 of 1

DRILLING FIRM: UES	**DATE COMPLETED:** 12/04/2024	**REMARKS:** -
DRILLER: BNC	**DEPTH:** 15'	
LOGGED BY: EC	**SURFACE ELEVATION:** 1238'	
RIG TYPE: CME 45	**ELEVATION DATUM:** WGS84	**GWT (ATD):** N/A **GWT (AD):** N/A
HAMMER TYPE: Auto	**GEOLOGY:** Smoky Hills	
METHOD: 4-inch Diameter Continuous Flight Augers	**COORDINATES:** 38.797851, -97.602581	

Depth (ft)	Sample Graphic	Samples: Sample Number	Samples: Uncorrected N-Value	Samples: Recovery / RQD	Graphic Log	Soil Description and Remarks	USCS	Laboratory Results: Moisture Content (%)	Laboratory Results: Wet Density (pcf)	Laboratory Results: Compressive Strength (ksf)	Laboratory Results: Fines Content (%)	Laboratory Results: Atterberg Limits (LL-PL-PI)	Elevation (ft)
		S-1	9			TOPSOIL 0.5 LEAN CLAY - dark brown, moist, stiff, trace sand and roots 2.5		20.1				43-20-23	
		S-2	21			LEAN CLAY - brown, moist, very stiff, trace sand, roots, and calcium veins	CL	16.1					1235
5		S-3	9			- stiff, else as above 8.5							1230
10		S-4	5			CLAYEY SAND - brown, moist, loose, fine grained, trace silt	SC	20.9					1225
15		S-5	7			- as above 15.0		16.6					

End of boring at 15'

FIGURE B-11

SHS Stadium Improvements
730 East Magnolia Road, Salina, Kansas
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Boring Log
Legend and Nomenclature

Items shown on boring logs refer to the following:

1. **Depth** - Depth below ground surface or drilling platform

2. **Sample** -Types designated by letter:

   A - Disturbed sample, obtained from auger cuttings or wash water.

   S - Split barrel sample, obtained by driving a 2-inch split-barrel sampler unless otherwise noted.

   C - California liner sample, obtained using a thick-walled liner sampler containing 2-inch-diameter liner tubes.

   U - Undisturbed sample, obtained using a thin-walled tube, 3-inch-diameter, or as noted, and open sampling head.

   Recovery - Recovery is expressed as a percentage of the length recovered to the total length pushed, driven or cored.

   Resistance - Resistance is designated as follows:

   P - Sample pushed in one continuous movement by hydraulic rig action.

   12 - The Standard Penetration Resistance is the number of blows for the last 12 inches of penetration of split spoon sampler, driven by a 140-pound hammer falling 30 inches.

   50/4" - Number of blows to drive sampler distance shown.

3. **Soil Description** - Description of material according to the Unified Soil Classification: word description giving soil constituents, consistency or density, and other appropriate classification characteristics. Geologic name or type of deposit and other pertinent information, where appropriate, is shown under Geologic Description or other Remarks. A solid line indicates the approximate location of stratigraphic change.

4. **Lab Data** – Laboratory test data.

5. **Legend**

A.D.	—	After drilling	N.A.	—	Not Applicable
A.T.D.	—	At time of drilling	N.D.	—	Not detectable due to drilling method
C.F.A.	—	Continuous flight auger			
D.W.L.	—	Drill water loss	N.E.	—	None encountered
D.W.R.	—	Drill water return	N.R.	—	Not recorded
E.D.	—	End of drilling	R.Q.D.	—	Rock quality designation
H.B.	—	Hole backfilled	R.W.B.	—	Rotary wash boring

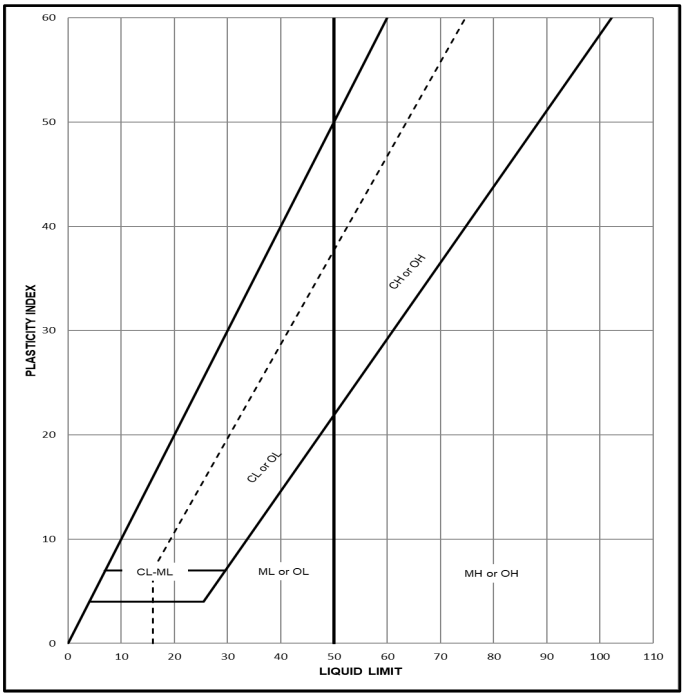
6. **Limitations** - The lines between materials shown on the boring logs represent approximate boundaries between material types and the changes may be gradual. Water level readings shown on the logs were made at the time and under the conditions indicated. Fluctuations in the water levels may occur with time. The boring logs in this report are subject to the limitations, explanations and conclusions of this report.

UNIFIED SOIL CLASSIFICATION SYSTEM

GROUP NAME	GROUP SYMBOL	SOIL DESCRIPTION	COMMENTS
Peat	Pt	Highly Organic Soils	50% or More Is Smaller than No. 200 Sieve
Fat Clay	CH	Clay - Liquid Limit => 50*	
Elastic Silt	MH	Silt - Liquid Limit => 50*	
Lean Clay	CL	Clay - Liquid Limit < 50*	
Silt	ML	Silt - Liquid Limit < 50*	
Silty Clay	CL-ML	Silty Clay*	
Clayey Sand	SC	Sands with 12 to 50 Percent Smaller than No. 200 Sieve	More than 50% Is Larger than No. 200 Sieve and % Sand > % Gravel
Silty Sand	SM		
Poorly-Graded Sand with Clay	SP-SC	Sands with 5 to 12 Percent Smaller than No. 200 Sieve	
Poorly-Graded Sand with Silt	SP-SM		
Well-Graded Sand with Clay**	SW-SC		
Well-Graded Sand with Silt**	SW-SM		
Poorly-Graded Sand	SP	Sands with Less than 5 Percent Smaller than No. 200	
Well-Graded Sand**	SW		
Clayey Gravel	GC	Gravels with 12 to 50 Percent Smaller than No. 200 Sieve	More than 50% Is Larger than No. 200 Sieve and % Gravel > % Sand
Silty Gravel	GM		
Poorly-Graded Gravel with Clay	GP-GC	Gravels with 5 to 12 Percent Smaller than No. 200 Sieve	
Poorly-Graded Gravel with Silt	GP-GM		
Well-Graded Gravel with Clay**	GW-GC		
Well-Graded Gravel with Silt**	GW-GP		
Poorly-Graded Gravel	GP	Gravels with Less than 5 Percent Smaller than No. 200	
Well-Graded Gravel**	GW		

*See Plasticity Chart for definition of silts and clays. If organic, use OL or OH.
**See definition of well-graded

PLASTICITY CHART



LEGEND OF TERMS

MOISTURE CONDITIONS
Dry, Slightly Moist, Moist, Very Moist, Wet (Saturated)

SOIL CONSISTENCY

Fine-Grained Soils

Description	SPT (N)	UCS (q_u, tsf)
Very Soft	0-2	0-0.25
Soft	2-4	0.25-0.50
Medium Stiff	4-8	0.50-1.0
Stiff	8-16	1.0-2.0
Very Stiff	16-32	2.0-4.0
Hard	>32	>4.0

Coarse-Grained Soils

Description	SPT (N)
Very Loose	0-4
Loose	4-10
Medium Dense	10-30
Dense	30-50
Very Dense	>50

CLASSIFICATION OF SANDS & GRAVELS

Boulders	Cobbles	Coarse Gravel	Fine Gravel	Coarse Sand	Medium Sand	Fine Sand	Fines (Silt or Clay)
	10"	3"	3/4"	#4	#10	#40	#200

Well-Graded Sands (SW): $C_u \geq 6$ and $1 \leq C_c \leq 3$
Well-Graded Gravels (GW): $C_u \geq 4$ and $1 \leq C_c \leq 3$

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APPENDIX C

Field & Laboratory Test Results

SUMMARY OF FIELD AND LABORATORY TESTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft.)	DIA. (in.)	MOISTURE CONTENT (%)	UNIT WEIGHT WET (pcf)	UNIT WEIGHT DRY (pcf)	VOID RATIO (e)	SAT. (%)	UNCONF. COMPR. STR. (ksf)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PL	ATTERBERG LIMITS PI	PASS NO. 200 (%)	SPT "N" (blows /ft)	USCS SOIL CLASS.
B-1	S-1	0.5-2.0		23.4						61	20	41		11	CH
	S-2	2.5-4.0		26.7										12	CH
	S-3	5.0-6.5		21.1										12	CH w/ sand
	S-4	8.5-10.0												11	CH
B-2	S-1	0.5-2.0		21.6										9	CH
	S-2	2.5-4.0		26.8						61	21	40		12	CH
	S-3	5.0-6.5		24.8										15	CH
	S-4	8.5-10.0												10	CH
B-3	S-1	0.5-2.0		26.2										10	CH
	S-2	2.5-4.0		23.5										12	CH
	S-3	5.0-6.5		22.0										13	CH
	S-4	8.5-10.0												12	CH
B-4	S-1	0.5-2.0		26.8										9	CH
	S-2	2.5-4.0		23.1										15	CH
	S-3	5.0-6.5		20.7										10	CH w/ sand
	S-4	8.5-10.0												11	CH
B-5	S-1	0.5-2.0		26.1						54	21	33		9	CH
	S-2	2.5-4.0		22.8										15	CH
	S-3	5.0-6.5		21.4										13	CH
	S-4	8.5-10.0												13	CH
B-6	S-1	0.5-2.0		24.5										10	CH
	S-2	2.5-4.0		23.1										17	CH
	S-3	5.0-6.5		18.3										17	CH
	S-4	8.5-10.0												13	CH
B-7	S-1	0.5-2.0		23.0						53	16	37		10	CH
	S-2	2.5-4.0		26.9										10	CH
	S-3	5.0-6.5		25.9										11	CH
	S-4	8.5-10.0												10	CH
B-8	S-1	0.5-2.0		27.4										10	CH
	S-2	2.5-4.0		18.9										24	CH
	S-3	5.0-6.5												16	CH
	S-4	8.5-10.0		18.6										15	CH
	S-5	13.5-15.0		17.7										3	SC
B-9	S-1	0.5-2.0								53	20	33		8	CH
	S-2	2.5-4.0		10.2										6	GC
	S-3	5.0-6.5												12	CH
	S-4	8.5-10.0												10	CH
	S-5	13.5-15.0		19.3										5	SC

UES™

GSI Engineering, LLC
a UES Company
4503 E. 47th Street South
Wichita, KS 67210
(316) 554-0725
www.gsinetwork.com

PROJECT
SHS Stadium Improvements

LOCATION
Salina, Kansas

PROJECT NUMBER
A24125.00993.000

DATE
January 17, 2025

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SUMMARY OF FIELD AND LABORATORY TESTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft.)	DIA. (in.)	MOISTURE CONTENT (%)	UNIT WEIGHT WET (pcf)	UNIT WEIGHT DRY (pcf)	VOID RATIO (e)	SAT. (%)	UNCONF. COMPR. STR. (ksf)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PL	ATTERBERG LIMITS PI	PASS NO. 200 (%)	SPT "N" (blows /ft)	USCS SOIL CLASS.
B-10	S-1	0.5-2.0		18.4						43	17	26		12	CL
	S-2	2.5-4.0		17.7										17	CL
	S-3	5.0-6.5												12	CL
	S-4	8.5-10.0												13	CL
	S-5	13.5-15.0		33.9										5	SC
B-11	S-1	0.5-2.0		20.1						43	20	23		9	CL
	S-2	2.5-4.0		16.1										21	CL
	S-3	5.0-6.5												9	CL
	S-4	8.5-10.0		20.9										5	SC
	S-5	13.5-15.0		16.6										7	SC

GSI Engineering, LLC
a UES Company
4503 E. 47th Street South
Wichita, KS 67210
(316) 554-0725
www.gsinetwork.com

PROJECT
SHS Stadium Improvements

LOCATION
Salina, Kansas

PROJECT NUMBER
A24125.00993.000

DATE
January 17, 2025

LIST OF DRAWINGS

General

Cover
Survey

Civil

C-01 Site and Grading Plan
C-02 Details

Architectural

A1.1 Site Plan
A1.2 Grandstand & Pressbox Plan

Grandstand and Pressbox Drawings – For Reference Only

E1 Seating and Foundation Plan
E2 Details
E3 Sections
E4 Sections
E5 Sections
E6 Sections
E7 Sections

SECTION 01010

GENERAL WORK REQUIREMENTS

1. GENERAL
Should conflict occur between these General Work Requirements and the General Conditions, the requirements of this Section take precedence.

2. INTENT OF DOCUMENTS
The Contract Drawings are complementary and what is called for by anyone shall be as binding as if called by all. The intention of the documents is to include all labor and materials, equipment and transportation necessary for the proper execution of the work.

3. MANUFACTURERS' DIRECTIONS
All manufactured articles, materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturers, unless herein specified to the contrary.

4. BUILDING PERMIT
As stated in Subparagraph 4.7.1, AIA DOCUMENT A201, General Conditions, the General Contractor shall secure and pay for the building permit.

5. MATERIALS - EQUIPMENT - SUBSTITUTION
   A. In general, these Specifications identify the required materials and equipment by naming one or more manufacturers, brand, model, catalog number and/or other identification; the first-named manufacturer's product used as a basis for design; the other named brands considered equivalent. Equivalent brand manufacturers named must furnish products consistent with the Specifications for the first-named product, as determined by the Architect. Base Bid shall include only those brands named and must be used on the project, except as hereinafter provided.
   B. Materials or equipment specified exclusively, Base Bid shall be based on same and used on project, except as hereinafter provided.
   C. Prior to receipt of bids, should Contractor wish to incorporate in Base Bid, brands or products other than those named in the Specifications, he shall submit written request for substitution to Architect not later than seven (7) days prior to date bids are due. Architect will consider request and items approved will be listed in an addendum issued to all bidders.
   D. After execution of Contract, substitution of product brands for those named in the Specifications will be considered, only if request is received within thirty (30) days after Contract Date and request includes showing credit due Owner.
   E. Materials specified equivalent and those proposed for substitution must be equal or better than first-named material in construction, efficiency, utility, aesthetic design, physical size shall not be larger than space provided for it. Request for substitution by full description and technical data in two (2) copies, including manufacturer's name, model, catalog number, photographs or cuts, physical dimensions, operating characteristics, and any other information for comparison.
   F. Owner reserves the right:
      1) To require any or all bidders, before execution of Contract, to state what materials they will use.
      2) To require "if bound with the Bid Form," the Contractor to fill out a BID SUPPLEMENT listing the BASE BID and "ADD" or "DEDUCT" for other materials he proposes to use.

6. APPROVAL OF SUBCONTRACTORS – MATERIALS
   A. The Contractor, if requested, must submit for approval before signing Agreement, list of Subcontractors and material suppliers enumerating items of work to be performed, name of materials, equipment, etc., to be furnished and/or installed. Refer to Paragraph - MATERIALS - EQUIPMENT - SUBSTITUTION.
   B. If the list is not requested prior to signing of Agreement, list, as described in previous paragraph, shall be furnished within ten (10) days of signing Agreement.

7. PROTECTION - Supplement, ARTICLE 10, AIA GENERAL CONDITIONS
   a. Refer to Paragraph - WEATHER CONDITIONS.
   b. Each Contractor shall assume responsibility for his materials stored on the premises.
   c. General Contractor shall take charge and assume general responsibility for proper protection of project during construction.

D. The General Contractor shall protect trees, shrubs, lawns and all landscape from damage, providing guards and covering. Damaged work shall be repaired or replaced at his expense. Protect streets and sidewalks and make repairs at his expense.

1) Water Protection. The General Contractor shall, at all times, protect the excavation, trenches, and/or the building from damage by rain water, spring water, ground water, backing up of drains or sewers and all other water. He shall provide all pumps and equipment and enclosures to provide this protection.
2) Temporary Drainage. The General Contractor shall construct and maintain all necessary temporary drainage and do all pumping necessary to keep the excavation free of water.
3) Snow and Ice. The General Contractor shall remove all snow and ice from public sidewalks and from the building, as may be required for the proper protection and/or prosecution of the Work.
4) Bracing, Shoring and Sheeting. The General Contractor shall provide all shoring, bracing and sheeting as required for safety and for the proper execution of the work and have same removed when the work is completed.
5) Guard Lights. The General Contractor shall provide and maintain guard lights at all barricades, railings, obstructions in the streets, roads or sidewalks and at all trenches or pits adjacent to public walks or roads.
6) Weather Conditions. The General Contractor shall, at all times, provide protection against weather; rain, winds, storms, frost, or heat, so as to maintain all work, materials, apparatus, and fixtures, free from injury or damage. At the end of the day's work, all new work likely to be damaged shall be covered.

8. WEATHER CONDITIONS

The Contractor shall protect all portions of his work and all materials, at all times from damage by water, freezing, frost and is to repair, replace and make good to the satisfaction of the Architect, any portion of same which may in the Architect's opinion, have been damaged by the elements.

9. GRADES, LINES, LEVELS, AND SURVEYS

The Owner will establish the lot lines, restrictions and a bench mark. All other grades, lines, levels, and bench marks shall be established and maintained by the General Contractor, who shall be responsible for same. The General Contractor shall verify all grades, lines, levels and dimensions as shown on the Drawings and he shall report all errors or inconsistencies in the above to the Architect before commencing work.

A. The General Contractor shall provide and maintain well-built batter boards at all corners. He shall establish bench marks in not less than two (2) widely separated places. As the work progresses, he shall establish bench marks at each floor, giving exact levels of the various floors.
B. As the work progresses, the General Contractor shall lay out in the forms and the rough flooring the exact location of all partitions as a guide to all trades.
C. The General Contractor shall verify all grades, lines, levels and dimensions as shown on the Drawings and he shall report any errors or inconsistencies in the above to the Architect before commencing work.

10. REQUIREMENTS IMMEDIATELY AFTER EXECUTION OF CONTRACT

Immediately after execution of the Contract, the Contractor shall deliver to the Architect the following items which are described more fully in following Articles:

Schedule of Values
Schedule of Operations
Progress Charts
Samples
Superintendent's name and resume of experience
List of Subcontractors and Material Suppliers

A. Schedule of Values on AIA Form G702, or other form approved by the Architect, a detailed breakdown of the Contract Sum indicating the amounts allotted to the various divisions of the work for labor and material. The schedule will serve as a guide to the Architect in determining the amounts due each month as the work progresses. The schedule shall be broken down as directed by the Architect.

B. Schedule of Operations based on the above Schedule of Values and indicating the progress of the work up to the first day of each month shall be prepared by the Contractor in a form approved by the Architect and shall be delivered to the Architect in duplicate with each application for payment.

C. Progress Charts based on the above specified schedule of operations and indicating the progress of the work up to the first day of each month shall be prepared by the Contractor in a form approved by the Architect and shall be delivered to the Architect in duplicate with each application for payment. Progress charts shall be in the form of a bar graph. Along with progress charts the Contractor shall provide an estimated monthly cash flow chart.

11. CONSTRUCTION PROCEDURE

A. Each Contractor shall schedule their work so as to cause a minimum of interference with business operations during all of the construction work.

B. Precautions and Cooperation

1) Notify the Owner 7 days in advance before any utility (natural gas, water, electricity, or sewer) is to be interrupted.

2) With proper notification, interruption in utilities up to 4 hours will be permitted without special provisions by the Contractor. *If any interruption of a utility exceeds 4 hours the Contractor must make arrangements for temporary alternate utility service.

3) Interruption of utilities must be coordinated with the Owner with changeovers and out of service at night. Weekend and evening changeovers of utilities shall occur with no additional cost to the Owner.

4) Openings to be cut in existing exterior walls must be saw cut. No jackhammer work will be permitted. Notify the Owner 7 days in advance of cutting of exterior walls.

11. TIME EXTENSIONS ADVERSE WEATHER

A. The Contractor shall comply with all provisions of the General Conditions in submitting any request for extension of Contract Time due to unusually severe weather.

B. Definitions:

1. Adverse Weather - Atmospheric conditions at a definite time and place which are unfavorable to construction activities.

2. Unusually Severe Weather - Weather which is more severe than the adverse weather anticipated for the season, location, or activity involved.

C. In order for any request of time extension due to unusually severe weather to be valid, the Contractor must document both of the following conditions.

1. The weather experienced at the project site during the Contract period is more severe that the adverse weather anticipated for the project location during any given month.

2. The unusually severe weather actually caused a delay to the completion of the project. The delay must be beyond the control and without fault or negligence by the Contractor.

D. The following schedule of monthly anticipated adverse weather delays will constitute the baseline for monthly weather time evaluations. The Contractor's Progress Schedule must reflect these anticipated adverse weather delays in all weather affected activities:
MONTHLY ANTICIPATED ADVERSE WEATHER DELAY WORK DAYS BASED ON FIVE (5) DAY WORK WEEK

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
5	4	7	8	10	9	8	8	7	5	4	4

END OF SECTION 01010

SECTION 01019
SPECIAL PROVISIONS

1. GENERAL
Should conflict occur between these Special Provisions and the General Conditions, the requirements of the Special Provisions shall take precedence.

2. TIME OF CONSTRUCTION – PENALTY CLAUSE
   a. Time of Construction - The Contractor will commence the work within ten (10) days after the Architect shall have given the Contractor written notice to commence construction to the satisfaction of the Owner within the calendar days as stated in Paragraph 3, below. The time for completion herein set forth shall be extended for the period of any reasonable delay which is due exclusively to causes beyond the control and without the fault of the Contractor, including acts of God, fires, floods, and direction by the Architect. It is impractical to perform any operation of construction and acts of omissions of the Owner with respect to matters for which Owner is solely responsible; provided, however, that no such extension of time for completion shall be granted the Contractor, unless within ten (10) days after the happening of any event relied upon by the Contractor for such extension of time, the Contractor shall have made a request, therefore, in writing to the Architect. Extended time will be submitted with pay request for Owner's approval.
   b. Penalty Clause - The time of completion of the construction of the project is of the essence of this Contract. Should the Contractor neglect, refuse, or fail to complete the project (100%) within the time herein agreed upon, after giving effect to extensions of time, if any, herein provided; the Owner shall have the right to deduct from and retain out of such money, which may then be due or which may become due and payable to the Contractor, the sum of TWO HUNDRED DOLLARS ($200.00) per day for each and every day that such construction is delayed in its completion beyond the specified time. If the amount due and to become due from the Contractor to the Owner is insufficient to pay in full any such penalites, the Contractor shall pay to the Owner the amount necessary to effect such payment in full; provided, however, that the Owner shall promptly notify the Contractor in writing of the manner in which the amount retained, deducted or claimed. No award is given to the Contractor for early completion.
   c. Joint Responsibility - The General Contractor and/or Subcontractors causing the delay in completion of the project shall be responsible for payment of the penalty. In no case shall the total penalty for all contracts exceed the sum of daily penalty multiplied by the number of days of delay in completion.

3. WORK SEQUENCE, SCHEDULE FOR COMPLETION AND LIQUIDATED DAMAGES
   a. Schedule requirements for each area are outlined as follows.

Work	Available Start (approximate)	*Substantial Completion	Liquidated Damages
Site work / Paving	May 26, 2026	July 31, 2026	$200/Calendar Day

   b. Schedule requirements for final completion – 30 days following substantial completion with liquidated damages equivalent to those identified for substantion completion.
   c. *Construction days stated in the table above are approximate, with Contractor to provide detailed schedule of each area for review and approval by the Owner prior to beginning construction.

4. ALTERNATES - Refer to Alternate Schedule, Section 01030
   a. Alternates specified are not a part of Base Bid, but are Alternates to same, their acceptance being at option of Owner.

5. CASH ALLOWANCES
   a. Costs included in Allowances: Cost of Product to Contractor or Subcontractor, less applicable trade discounts, delivery to site, except those taxes saved by use of Owner's tax exemption.
   b. Costs Not Included in the Allowance: Fees for overhead and profit, product handling at the site, including unloading, uncrating, and storage; protection of Products from elements and from damage and labor for installation and finishing.
   c. 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 Proposal Requests and Change Orders.
   d. Contractor Responsibilities:
      1. Assist Architect/Engineer in 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.
6. Product handling at the site, including unloading, uncrating and storage, protection of Products from elements and from damage and labor for installation and finishing.
7. The Contractor shall include in his Bid all fees for all cash allowances.

e. Funds will be drawn from Cash Allowances only by written authorization from Owner.
f. Cash Allowances:
   1. Contingency Allowance Base Bid– In addition to the specification sections listed above, include an allowance of **$10,000.00** in the general bid and contract amount to be included in the contractors base bid. This allowance shall be used at the sole discretion of the Architect and/or Owner specifically for hidden conditions discovered in the field or on site, the addition of labor, parts and/or materials required for timely completion in conjunction with the general scope of work.

6. ENUMERATION OF DRAWINGS AND SPECIFICATIONS
   a. Correlation. Accompanying these Specifications are the Drawings, which jointly with these Specifications, are intended to explain each other and describe and coordinate the work to be performed under the Contract.
   b. Verification of Documents. Before submitting his bid, each Bidder shall check his set(s) of Drawings and Specifications and advise the Architect if any sheets are missing.
   c. Specifications Explanations. For convenience of reference, the Specifications are separated into Titled Divisions and Sections. Such separation shall not, however, operate to make the Architect an arbiter to establish limits between the Contractor and Subcontractor or Sub-Subcontractor.
   d. Drawings. Refer to LIST OF DRAWINGS.
   e. Specifications. Refer to TABLE OF CONTENTS.

7. WARRANTIES
   Before being eligible for final payment, Contractor shall deliver to Owner, through Architect, all special warranties specified for materials, equipment and installation.

8. OPERATING INSTRUCTIONS
   Before being eligible for final payment, Contractor shall deliver to Owner, through Architect, three (3) copies of manufacturer's operating and maintenance instructions, and one (1) CD/DVD containing a complete set or manufacturers operating instructions, a complete set of shop drawings on each piece of equipment. Electronic files shall be in PDF format with files organized into single documents for Architectural, Mechanical, and Electrical divisions.

9. AS-BUILT DRAWINGS
   Before being eligible for final payment, the Electrical and Mechanical Contractors shall prepare and deliver to Owner, through Architect, One (1) CD/DVD containing AS-BUILT DRAWINGS in PDF format. These drawings shall consist of marked-up prints, and shall show the correct location of every item of equipment, piping, conduit, panel boards, ductwork, switches, valves, etc. If marked-up prints are used, and scanned, they shall be new white prints without miscellaneous markings. All markings shall be clearly legible and identified.

10. CERTIFICATE OF COMPLIANCE
    Upon completion of project, Contractor is to furnish written Certification to the Architect that he has complied with every paragraph of the Specifications and Drawings.

11. CONTRACTOR'S AFFIDAVIT OF RELEASE OF LIENS
    Upon completion of project, Contractor shall submit to Owner a signed Contractor's Affidavit of Release of Liens prior to final payment.

12. CONTRACTOR'S MONTHLY APPLICATION FOR PAYMENT FORM
    Contractor's monthly Application for Payment shall be submitted as per General Conditions. AIA Document G702, Application and Certificate for Payment is approved and acceptable.

13. FILING AND RECORDING OF BONDS
    In addition to furnishing the number of combination Performance Bond and Labor and Materials Payment Bond, and Statutory Bond, if required, the Contractor shall file copies of such bonds with Clerk of the District Court and furnish Architect with receipt furnished by Clerk of the District Court, covering charges for filing and recording of said bonds.

14. STATUTORY BONDS

In addition to furnishing the combination Performance and Labor and Materials Payment Bond specified in General Conditions, the Contractor shall furnish Statutory Bond in an amount not less than 100% of the Agreement in such numbers and form stated in Sample Copy bound in the Specifications. Statutory Bond shall be filed and recorded with Clerk of the District Court, as specified in Paragraph - FILING AND RECORDING OF BONDS.

15. DOCUMENTS FURNISHED CONTRACTORS

The General Contractor will be furnished, free of charge, the following working drawings and specifications, including modifications for construction of the project - 20 sets. The General Contractor will be responsible for distribution of these sets to the Subcontractors and suppliers. The Contractor shall pay the actual cost of reproduction and postage for all additional sets requested by him.

16. TESTING AND INSPECTIONS

a. The General Contractor shall be responsible for coordination and scheduling of all inspections and testing as required by the Contract documents. The Contractor shall include a testing and inspection allowance in his bid as described in paragraph 5.f.3 of this section. The Contractor shall pay all costs associated with testing and all direct costs from the testing/inspection company and shall be deducted from the testing and inspection allowance. Re-testing/inspection costs associated with incorrect or defective work shall be paid by the Contractor and such costs are not to be deducted from the allowance.
b. All sampling and testing procedures shall be performed by the inspection compamy responsible for inspection and testing.

17. SALES TAX EXEMPTIONS

a. Materials and equipment incorporated into this project **are exempt** from the payment of sales tax under the laws of the State of Kansas and such sales tax **shall not be included in the Bid** of the Bidder.

b. The Owner will provide the Contractor with a proper exemption certificate within twenty (20) days of the Contract date.
    1) Should the Owner fail to provide an exemption certificate within the required time period, the Contractor shall be reimbursed monthly for all sales tax amounts for which he becomes liable until such certificate is provided.
    2) To minimize the Contractor's record keeping expense, the Owner shall provide an exemption certificate within sixty (60) days or it shall be presumed that the project will proceed on a non-exempt basis, and the Contract amount shall be equitably adjusted in writing in a lump sum amount sufficient to cover the Contractor's sales tax expense.
    3) Upon issuance of a proper exemption certificate to the Contractor, the Contractor shall assume full responsibility for his own proper use of the certificate, and shall pay all costs of any legally assessed penalties relating to the Contractor's use of the exemption certificate.

END OF SECTION 01019

CONTRACTOR'S REQUEST FOR INFORMATION

TO:

REQUEST FOR INFORMATION NO. _____
REQUESTED BY: _____
RESPONSE REQUIRED BY: _____

RE:

SPECIFICATION REFERENCE: _____
DRAWING REFERENCE: _____

SUBJECT: DISCREPANCY: _____ CLARIFICATION: _____ OTHER: _____

REQUEST:

_____
_____
_____
_____
_____
_____
_____
_____
_____

SIGNED: _____ DATE: _____

ARCHITECT'S RESPONSE: This information is provided as an interpretation of the Contract Documents for implementation. It shall not be authorization for change to the Contract Sum or the Contract Completion Time. Should this information result in a claim for a change in the Contract Sum or Contract Completion Time, the Contractor shall notify the Architect within twenty (20) calendar days of receipt.

_____
_____
_____
_____
_____
_____
_____
_____
_____

Response Distribution
Original - Contractor

SIGNED: _____ DATE: _____

SUBSTITUTION REQUEST FORM

ONE ITEM PER FORM
FILL IN ALL BLANKS

Project: _____ Date: _____

We hereby submit for your review the following substitution for the following specified material for the above project:

Section	Page	Paragraph	Specified Material

PROPOSED SUBSTITUTION: _____
Attach complete technical data, including laboratory tests, if applicable. Include complete information on changes to Drawings and/or Specifications which proposed substitution will require for its proper installation.

A. Does the Substitution effect dimensions shown on Drawings in any way?

_____

B. Will the undersigned pay for any changes to the building design, including engineering and detailing costs caused by the requested substitution?

_____

C. What effect does substitution have on schedule or other trades?

_____

D. What effect does substitution have on cost?

_____

E. Differences between proposed substitution and specified items are:
_____ Same _____ Different (Explain)

_____

F. Contractor represents that he has investigated the proposed product and determined that it meets or exceeds the quality of the specified product.

SUBMITTED BY:

_____ Accepted _____ Accepted as Noted
_____ Not Accepted _____ Received Too Late

_____
(Firm)

_____ _____ _____
(Address) (By) (Date)

_____ _____
(Telephone) (Remarks)

_____ _____
(Signature)

FINAL LIEN WAIVER AND RELEASE

Reference that certain Agreement between _____, as Contractor, and _____ as Owner, dated _____, on the project known as _____ located at _____for work to be performed by said Contractor.

Reference also that certain invoice of Contractor to said Owner in the Amount of $_____ for work, labor and materials installed in or furnished for said project by and through _____.

The receipt by Contractor of Owner's remittance for the amount said invoice, contingent upon the final clearance and payment of said remittance, shall constitute payment for the full contract amount, including change orders and all other claims or demands of any nature whatsoever which Contractor has or may have in connection with the Project or Contract referenced herein, of $_____, for which Contractor (a) agrees to and does hereby waive and release said property, project and the Owner and all bond or payment sureties and guarantors from; and (b) does hereby agree to protect, indemnify, defend and hold harmless said property, project, Owner, sureties and guarantors against;

(1) any and all liens, statutory or otherwise, and

(2) any or all obligations under any bond or guaranty for payment furnished by or to said Owner, whether pursuant to agreement or requirement of law, and

(3) any and all other claims whatsoever, statutory or otherwise,

for any and all work, labor and materials furnished by or through said Contractor, its subcontractors and material suppliers for the entirety of said project.

The remittance of the Owner, identified as payment of said above invoice and endorsed by Contractor and marked "paid" or otherwise canceled by the bank against which said remittance was drawn shall constitute conclusive proof that said invoice was paid and the payment thereof was received by the Contractor, and thereupon, this final lien waiver shall become effective automatically and without requirement of any further act, acknowledgment or receipt of the part of said Contractor.

Contractor does further warrant that Contractor has not and will not assign its claims for payment nor its right to perfect a lien against said property and project, and the undersigned representative of the contractor has the right to execute this waiver and release thereof.

The undersigned representative of Contractor does hereby certify under oath that he is fully authorized and empowered to execute this instrument for and in behalf of said Contractor and to bind them hereto and does in fact so execute this final lien release.

Dated this _____ day of _____, 20____.

Contractor: _____

By: _____

Title: _____

Subscribed and affirmed to before me, the undersigned Notary Public within and for the State of _____ and the County of _____, this _____ day of_____, 20____, in the City of _____.

_____
Notary Public within and for said
County and State

SECTION 01030

ALTERNATES

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 SUMMARY

A. This Section includes administrative and procedural requirements for alternates.

1.3 GENERAL

1. The General Contractor shall state in his Bid Form the amount of dollars to be ADDED or DEDUCTED from his Base Bid for the following Alternates.
2. Alternates are not in order of acceptance.
3. It shall be the responsibility of the General Contractor to advise all necessary personnel and suppliers as to the nature and extent of all alternates selected by the owner.
4. Circle Add or Deduct to indicate that the alternate price is to be added or subtracted from the base bid.

1.4 DEFINITIONS

A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the Bidding Requirements that may be added to or deducted from the Base Bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
   1. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.5 PROCEDURES

A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
   1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.

B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.

C. Execute accepted alternates under the same conditions as other work of the Contract.

D. Schedule: A Schedule of Alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 – PRODUCT (Not Used)

PART 3 – EXECUTION

SCHEDULE OF ALTERNATES

1. ALTERNATE NO. 1
(If added by Addendum)

Add/Deduct $ _____

2. ALTERNATE NO. 2
(If added by Addendum)

Add/Deduct $ _____

3. ALTERNATE NO. 3
(If added by Addendum)

Add/Deduct $ _____

4. ALTERNATE NO. 4
(If added by Addendum)

Add/Deduct $ _____

5. ALTERNATE NO. 5
(If added by Addendum)

Add/Deduct $ _____

END OF SECTION 01030

SECTION 015000

TEMPORARY FACILITIES AND CONTROLS

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 SUMMARY
A. This Section includes requirements for temporary utilities, support facilities, and security and protection facilities.

1.3 DEFINITIONS
A. Permanent Enclosure: As determined by Architect, permanent or temporary roofing is complete, insulated, and weathertight; exterior walls are insulated and weathertight; and all openings are closed with permanent construction or substantial temporary closures.

1.4 USE CHARGES
A. Water Service: Water from Owner's existing water system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.
B. Electric Power Service: Electric power from Owner's existing system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

1.5 SUBMITTALS
A. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.

1.6 QUALITY ASSURANCE
A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

1.7 PROJECT CONDITIONS
A. Temporary Use of Permanent Facilities: Installer of each permanent service shall assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

PART 2 - PRODUCTS

2.1 MATERIALS
A. Lumber and Plywood: Wood or cold for framing. Exposed plywood to be A-C face, protect edges to prevent splintering. Fire-retardant treated where retained for permanent installation.
B. Gypsum Board: Minimum 5/8 inch (12.7 mm) thick by 48 inches (1219 mm) wide by maximum available lengths; regular-type panels with tapered edges. Comply with ASTM C 36/C 36M. TYPE X, Fire Rated.
C. Insulation: Unfaced mineral-fiber blanket, manufactured from glass, slag wool, or rock wool; with maximum flame-spread and smoke-developed indexes of 25 and 50, respectively.
D. Paint: Touch-up areas to match existing adjacent finish where affected by new construction/installations.

2.2 TEMPORARY FACILITIES
A. Field Offices, General: Coordinate with Owner for location of field office location. Move field office based on work area location and project phasing.

B. Common-Use Field Office: NA
C. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations.
   1. Store combustible materials apart from building.
   2. Coordinate with owner for storage locations when acclimation to building is required.

2.3 EQUIPMENT
A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.
B. HVAC Equipment: Unless Owner authorizes use of permanent HVAC system, provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.
   1. Use of gasoline-burning space heaters, open-flame heaters, or salamander-type heating units is prohibited.
   2. Heating Units: Listed and labeled for type of fuel being consumed, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
   3. Permanent HVAC System: If Owner authorizes use of permanent HVAC system for temporary use during construction, provide filters at air grille in system. Before Substantial Completion, all units and ductwork shall be thoroughly cleaned and restored to new condition.

2.4 SIGN AND ADVERTISING
A. The General Contractor shall furnish and erect one (1) painted sign, 8 x 12 in size, as shown on the last page of this Section and placed where directed. Sign shall show the following:
   1. Name of Project
   2. Name, Logo, and Address of Architect
   3. Name, Logo, and Address of General Contractor
   4. Name of Mechanical Subcontractor
   5. Name of Electrical Subcontractor
B. Post entire construction area with DANGER and NO TRESPASSING signs to comply with safety and insurance regulations.
C. Keep premises clear and free from other signs or posters.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL
A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.2 TEMPORARY UTILITY INSTALLATION
A. General: Install temporary service or connect to existing service.
   1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
B. Sewers and Drainage: Provide temporary utilities to remove effluent lawfully.
   1. Connect temporary sewers to municipal system as directed by authorities having jurisdiction.
C. Water Service: Use of Owner's existing water service facilities will be permitted, as long as facilities are cleaned and maintained in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.
D. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
E. Heating and Cooling: Provide temporary heating and cooling required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed.

F. Ventilation and Humidity Control: Provide temporary ventilation required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce ambient condition required and minimize energy consumption.

G. Electric Power Service: Use of Owner's existing electric power service will be permitted. Coordination is required to provide power when new service is installed.

H. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.
   1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.
   2. Install lighting for Project identification sign.
      a. Principal subcontractors' field and home offices.
   2. Provide superintendent with cellular telephone for use when away from field office.

I. Electronic Communication Service: Provide temporary electronic communication service, including electronic mail. Cellular e-mail service is acceptable.

3.3 SUPPORT FACILITIES INSTALLATION

A. General: Comply with the following:
   1. Provide incombustible construction for offices, shops, and sheds located within construction area or within 30 feet (9 m) of building lines. Comply with NFPA 241.
   2. Maintain support facilities until near Substantial Completion. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.

B. Traffic Controls: Comply with requirements of authorities having jurisdiction.
   1. Protect existing site improvements to remain including curbs, pavement, and utilities.
   2. Maintain access for fire-fighting equipment and access to fire hydrants.

C. Parking: Use designated areas of Owner's existing parking areas for construction personnel.

D. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.
   1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties nor endanger permanent Work or temporary facilities.
   2. Remove snow and ice as required to minimize accumulations.

E. Project Identification and Temporary Signs: Provide Project identification and other signs as indicated. Install signs where indicated to inform public and individuals seeking entrance to Project. Unauthorized signs are not permitted.
   1. Provide temporary, directional signs for construction personnel and visitors.
   2. Maintain and touchup signs so they are legible at all times.

F. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Contractor is responsible to provide waste disposal dumpsters. Use of owner’s trash dumpsters is not acceptable. Coordinate location with owner. Move as required by project phasing. Containers must be emptied on a regular basis. Repair any damage to yard, sidewalks, sprinklers, landscaping, etc. caused by dumpsters or emptying or moving of equipment.

G. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.
   1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.

H. Temporary Elevator Use: Refer to Division 14 Sections for temporary use of new elevators.

I. Temporary Stairs: Until permanent stairs are available, provide temporary stairs where ladders are not adequate.

J. Temporary Use of Permanent Stairs: Cover finished, permanent stairs with protective covering of plywood or similar material so finishes will be undamaged at time of acceptance.

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

A. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
   1. Comply with work restrictions required by owner use and occupancy of the building and site.

B. Temporary Erosion and Sedimentation Control: Comply with requirements specified in Division 2 Section "Site Clearing" and Erosion Control drawings.

C. Temporary Erosion and Sedimentation Control: Provide measures to prevent soil erosion and discharge of soil-bearing water runoff and airborne dust to adjacent properties and walkways, according to requirements of authorities having jurisdiction.
   1. Inspect, repair, and maintain erosion- and sedimentation-control measures during construction until permanent vegetation has been established.
   2. Reference erosion control drawings for additional requirement.

D. Storm water Control: Comply with authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of storm water from heavy rains.

E. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.

F. Pest Control: Engage pest-control service to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests and to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues at Substantial Completion. Obtain extended warranty for Owner. Perform control operations lawfully, using environmentally safe materials.

G. Site Enclosure Fence: **Before construction operations begin**, furnish, and install site enclosure fence in a manner that will prevent people and animals from easily entering site except by entrance gates.
   1. Extent of Fence: As required to secure the construction site. The City shall retain access to the existing Maintenance building throughout construction.
   2. Maintain security by limiting number of keys and restricting distribution to authorized personnel. **Provide Owner with one set of keys.**

H. Security Enclosure and Lockup: Install substantial temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security.

I. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.

J. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.
   1. Where heating or cooling is needed and permanent enclosure is not complete, insulate temporary enclosures.

K. Temporary Partitions: Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by Owner from fumes and noise.
   1. Construct dustproof partitions with gypsum wallboard with joints taped on occupied side, and fire-retardant plywood on construction operations side.
   2. Insulate partitions to provide noise protection to occupied areas.
   3. Seal joints and perimeter. Equip partitions with dustproof doors and security locks.
   4. Protect air-handling equipment.
   5. Weather strip openings.
   6. Provide walk-off mats at each entrance through temporary partition.

L. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses.
   1. Prohibit smoking in completed facilities.
   2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
   3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.

3.5 OPERATION, TERMINATION, AND REMOVAL

A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.

B. Maintenance: Maintain facilities in good operating condition until removal.
   1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.

C. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
   1. Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.
   2. Remove temporary paving not intended for or acceptable for integration into permanent paving. Where area is intended for landscape development, remove soil and aggregate fill that do not comply with requirements for fill or subsoil. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs, and sidewalks at temporary entrances, as required by authorities having jurisdiction.
   3. At Substantial Completion, clean and renovate permanent facilities used during construction period. Reference General Conditions.

END OF SECTION 015000

SECTION 01731

CUTTING AND PATCHING

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 SUMMARY
A. This Section includes procedural requirements for cutting and patching.

1.3 QUALITY ASSURANCE
A. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio.
B. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.
   1. Primary operational systems and equipment.
   2. Air or smoke barriers.
   3. Fire-suppression systems.
   4. Mechanical systems piping and ducts.
   5. Control systems.
   6. Communication systems.
   7. Electrical wiring systems.
C. Miscellaneous Elements: Do not cut and patch miscellaneous elements or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety.
   1. Water, moisture, or vapor barriers.
   2. Membranes and flashings.
   3. Exterior curtain-wall construction.
   4. Equipment supports.
   5. Piping, ductwork, vessels, and equipment.
   6. Noise- and vibration-control elements and systems.
D. Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.
E. Cutting and Patching Conference: Before proceeding, meet at Project site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.

PART 2 - PRODUCTS

2.1 MATERIALS
A. General: Comply with requirements specified in other Sections.

PART 3 - EXECUTION

3.1 EXAMINATION
A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.
   1. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with in-place finishes or primers.
   2. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Temporary Support: Provide temporary support of Work to be cut.

B. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.

3.3 PERFORMANCE

A. General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
   1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.

B. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
   1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
   2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
   3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
   4. Excavating and Backfilling: Comply with requirements in applicable Division 2 Sections where required by cutting and patching operations.
   5. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
   6. Proceed with patching after construction operations requiring cutting are complete.

C. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections.

D. Cleaning: Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar materials.

END OF SECTION 01731

SECTION 02110

SITE CLEARING

PART 1 GENERAL

1.01 SECTION INCLUDES
- A. Reference and follow all recommendations, UES Geotechnical Exploration Report dated January 17, 2025
- B. Remove surface debris. Remove paving, curbs, and improvements.
- C. Clear site of plant life and grass.
- D. Remove trees and shrubs.
- E. Remove root system of trees and shrubs.
- F. Topsoil excavation.
- G. Proof roll, Compact and Verify compaction.

1.02 REGULATORY REQUIREMENTS
- A. Conform to applicable local codes and ordinances for disposal of debris, burning debris on site, use of herbicides, etc.
- B. Coordinate clearing Work with utility companies as required.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.01 PREPARATION
- A. Verify that existing plant life designated to remain, is tagged or identified.
- B. Coordinate with school district for equipment to be removed by owner.

3.02 PROTECTION
- A. Locate, identify, and protect utilities that remain, from damage.
- B. Protect trees, plant growth, and features designated to remain, as final landscaping.
- C. Protect bench marks and existing structures from damage or displacement.

3.03 CLEARING
- A. Clear areas required for access to site and execution of Work.
- B. Remove paving, curbs, and improvements designated.
- C. Remove trees and shrubs indicated. Remove stumps, root system surface rock and other areas indicated or implied for completion of the project.
- D. Clear undergrowth and deadwood, without disturbing subsoil. Strip and clear vegetation from areas designated to be filled, excavated, regraded, or landscaped.

3.04 REMOVAL
- A. Remove debris, rock, and extracted plant life from site.
- B. Remove wood fencing from site.

3.05 TOPSOIL EXCAVATION
- A. Excavate clean topsoil from areas to be further excavated, filled, re-landscaped, or regraded.
- B. Stockpile in area designated on site to depth not exceeding 8 feet. Protect from erosion. Remove excess topsoil not being reused, from site.

END OF SECTION 02110

SECTION 02205

SOIL MATERIALS

PART 1 GENERAL

1.01 SECTION INCLUDES
- A. Subsoil and topsoil materials.
- B. Proof Roll, verification of compaction & compaction, recommendations, UES Geotechnical Exploration Report dated January 17, 2025

1.02 REFERENCES
- A. ANSI/ASTM D698 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 5.5 lb (2.49 Kg) Rammer and 12 inch (304.8 mm) Drop.
- B. ASTM D2487 - Classification of Soils for Engineering Purposes, UES Geotechnical Exploration Report dated January 17, 2025

PART 2 PRODUCTS

2.01 SOIL MATERIALS
- A. Existing Soils & Fill Material: Under slabs and within the zone of influence of paving or foundation elements material must be compacted, treated and as approved by a **geotechnical engineer hired and paid, by Contractor**. Reference and follow all recommendations, UES Geotechnical Exploration Report dated January 17, 2025. Fill and Backfill Material: Other areas, foundation backfill, site grading, and pavement, should be clean site material or similar borrow material, approved by the geotechnical engineer. Foreign matter shall be limited in size to 1 ½ " in greatest dimension, and be limited to no more than 5% by volume or weight.
- B. Topsoil: Incorporate topsoil into subsoil 3"- 4". Topsoil should be blended and contain the following components by percentage:

Organic Matter:	4 - 6 %
Sand (ASTM - 300 and 75% between .25mm and .75mm):	40 - 50%
Silt:	20 - 25%
Clay:	25 - 40%

2.02 SOURCE QUALITY CONTROL
- A. Inspection and testing will be performed by an independent laboratory, Contractor shall bear all related costs under provisions of General Requirements.
- B. Tests and analysis of soil material will be performed in accordance with ANSI/ASTM D698.
- C. If tests indicate materials do not meet specified requirements, change material and retest at no cost to Owner.
- D. Reference and follow all recommendations, UES Geotechnical Exploration Report dated January 17, 2025

PART 3 EXECUTION

3.01 STOCKPILING
- A. Stockpile materials on site at locations indicated or in areas that will not impact project completion.
- B. Stockpile in sufficient quantities to meet project schedule and requirements.
- C. Separate differing materials with dividers or stockpile apart to prevent mixing.
- D. Direct surface water away from stockpile site to prevent erosion or deterioration of materials.

3.02 STOCKPILE CLEANUP
- A. Remove stockpile, leave area in a clean and neat condition. Grade site surface to prevent free standing surface water.

END OF SECTION 02205

SECTION 02211

ROUGH GRADING

PART 1 GENERAL

1.01 SECTION INCLUDES
- A. Reference and follow all recommendations, UES Geotechnical Exploration Report dated January 17, 2025
- B. Removal of topsoil and subsoil. Cutting, grading, filling and rough contouring the site for site structures and paving.
- C. Proof roll, Compaction and verification of compaction, by Geo-Technical Engineer.

PART 2 PRODUCTS

2.01 MATERIALS
- A. Topsoil, Existing Soils, Fill and Structural Fill: As specified in Section 02205.

PART 3 EXECUTION

3.01 EXAMINATION
- A. Verify that survey bench mark and intended elevations for the Work are as indicated.

3.02 PREPARATION
- A. Identify required lines, levels, contours, and datum.
- B. Stake and flag locations of known utilities. Locate, identify, and protect utilities that remain, from damage. Notify utility company to remove and relocate utilities.
- C. Protect above and below grade utilities that remain.
- D. Protect plant life, lawns, rock outcropping and other features remaining as a portion of final landscaping.
- E. Protect bench marks, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.

3.03 SUBSOIL EXCAVATION
- A. Excavate subsoil from areas to be further excavated, landscaped, or regraded.
- B. Stockpile in area designated on site to depth not exceeding 8 feet. Protect from erosion. Remove subsoil not being reused, from site.
- C. When excavating through roots, perform work by hand and cut roots with sharp axe.

3.04 FILLING & COMPACTION
- A. Fill or grade existing areas to contours and elevations with unfrozen materials.
- B. Grade Existing Soils and Place fill materials on continuous layers and compact in accordance with Schedule at end of Section.
- C. Maintain optimum moisture content of fill materials to attain required compaction density.
- D. Slope grade away from paving as indicated and a minimum 2 inches in 10 ft. unless noted otherwise.
- E. Make grade changes gradual. Blend slope into level areas.
- F. Remove surplus fill materials from site.

3.05 TOLERANCES
- A. Top Surface of Subgrade: Plus or minus 1/10 foot.

3.06 FIELD QUALITY CONTROL

A. Field inspection and testing will be performed under provisions of the General Requirements.
B. Compaction testing will be performed in accordance with ANSI/ASTM D698.
C. If tests indicate Work does not meet specified requirements, remove Work, replace and retest at no additional cost to the Owner.

3.07 SCHEDULES

A. Structural Fill: (Paving)
   1. Fill Maximum 8 inches compacted depth.
   2. Compact to minimum 95 percent of maximum density.
B. Subsoil Fill:
   1. Fill Maximum 8 inches compacted depth.
   2. Compact to minimum 90 percent of maximum density.
C. Topsoil Fill:
   1. Fill Maximum 8 inches depth.

END OF SECTION 02211

SECTION 02222

EXCAVATING

PART 1 - GENERAL

1.01 SECTION INCLUDES
- A. Reference and follow all recommendations, UES Geotechnical Exploration Report dated January 17, 2025
- B. Excavating for paving and landscaping.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

3.01 PREPARATION
- A. Identify required lines, levels, contours, and datum.
- B. Locate, identify, and protect utilities that remain, from damage.
- C. Notify utility company to remove and relocate utilities.
- D. Protect plant life, lawns, rock outcropping and other features remaining as a portion of final landscaping.
- E. Protect bench marks, existing structures, fences, sidewalks, paving and curbs from excavation equipment and vehicular traffic.

3.02 EXCAVATION
- A. Underpin adjacent structures which may be damaged by excavation work.
- B. Excavate subsoil required to accommodate building foundations, slabs-on-grade, paving and site structures, construction operations.
- C. Machine slope banks to angle of repose or less, until shored.
- D. Do not interfere with 45 degree bearing splay of foundation.
- E. Grade top perimeter of excavation to prevent surface water from draining into excavation.
- F. Hand trim excavation. Remove loose matter.
- G. Remove lumped subsoil, boulders, and rock up to 1/3 cu yd measured by volume.
- H. Notify Architect/Engineer of unexpected subsurface conditions and discontinue affected Work in area until notified to resume work.
- I. Correct areas over-excavated in accordance with Section 02223.
- J. Stockpile excavated material in area designated on site and remove excess material not being reused, from site.

3.03 FIELD QUALITY CONTROL
- A. Field inspection will be performed under provisions of the General Requirements.
- B. Provide for visual inspection of bearing surfaces.

3.04 PROTECTION
- A. Protect excavations by methods required to prevent cave-in or loose soil from falling into excavation.
- B. Protect bottom of excavations and soil adjacent to and beneath foundation, from freezing.

END OF SECTION 02222

SECTION 02223

BACKFILLING

PART 1 GENERAL

1.01 SECTION INCLUDES
- A. Reference and follow all recommendations, UES Geotechnical Exploration Report dated January 17, 2025
- B. Site filling and backfilling. Paving perimeter and site structure backfilling to subgrade elevations.
- C. Fill under slabs-on-grade, paving.
- D. Consolidation, compaction and compaction verification, as scheduled.
- E. Fill for over-excavation.

1.02 REFERENCES
- A. ANSI/ASTM D698 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 5.5 lb (2.49 Kg) Rammer and 12 inch (304.8 mm) Drop.

PART 2 PRODUCTS

2.01 FILL MATERIALS
- A. Fill: As specified in Section 02205.

PART 3 EXECUTION

3.01 EXAMINATION
- A. Verify subdrainage, dampproofing or waterproofing installation has been inspected and completed.

3.02 PREPARATION
- A. Compact subgrade to density requirements for subsequent backfill materials.
- B. Cut out soft areas of subgrade not capable of in situ compaction. Backfill with fill and compact to density equal to or greater than requirements for subsequent fill material.
- C. Scarify and proof roll subgrade surface to a depth of 8 to 12 inches to identify soft spots; fill and compact to density equal to or greater than requirements for subsequent fill material.

3.03 BACKFILLING
- A. Backfill areas to contours and elevations with unfrozen materials.
- B. Systematically backfill to allow maximum time for natural settlement. Do not backfill over porous, wet, frozen or spongy subgrade surfaces.
- C. Fill, Place and compact materials in continuous layers not exceeding 8 inches compacted depth.
- D. Employ a placement method that does not disturb or damage other work.
- E. Maintain optimum moisture content of backfill materials to attain required compaction density. Backfill against supported foundation walls. Do not backfill against unsupported foundation walls.
- F. Backfill simultaneously on each side of unsupported foundation walls until supports are in place.
- G. Slope grade away from building minimum 2 inches in 10 ft. unless noted otherwise.
- H. Make gradual grade changes. Blend slope into level areas.
- I. Remove surplus backfill materials from site.
- J. Leave fill material stockpile areas free of excess fill materials.

3.04 TOLERANCES
- A. Top Surface of Backfilling Under Paved Areas: Plus or minus 1 inch from required elevations.
- B. Top Surface of General Backfilling: Plus or minus 1 inch from required elevations.

3.05 FIELD QUALITY CONTROL
- A. Field inspection and testing will be performed by an independent laboratory, Contractor shall bear all related costs under provisions of General Requirements.
- B. Compaction testing will be performed in accordance with ANSI/ASTM D698.
- C. If tests indicate Work does not meet specified requirements, remove Work, replace and retest at no additional cost to the Owner.

D. Proof roll compacted fill surfaces under slabs-on-grade, and paving.

3.06 PROTECTION OF FINISHED WORK

A. Protect finished Work under provisions of the General Requirements.
B. Reshape and re-compact fills subjected to vehicular traffic.

3.07 SCHEDULE

A. Fill Under Grass Areas:
   1. Fill to 4 inches below finish grade.
D. Fill Under Asphalt or Concrete Paving:
   1. Compact subsoil to 95 percent of its maximum dry density.
E. Fill to Correct Overexcavation:
   1. Lean concrete to minimum compressive strength of 1000 psi.
   2. Compact approved fill to 95 percent of its maximum dry density where allowed.

END OF SECTION 02223

SECTION 02225

TRENCHING

PART 1 GENERAL

1.01 SECTION INCLUDES
- A. Excavating trenches for utilities from 5 feet outside building to municipal utilities.
- B. Compacted fill from top of utility bedding to subgrade elevations.
- C. Backfilling and compaction.

1.02 REFERENCES
- A. ANSI/ASTM D698 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 5.5 lb (2.49 Kg) Rammer and 12 inch (304.8 mm) Drop.

1.03 FIELD MEASUREMENTS
- A. Verify that survey bench mark and intended elevations for the Work are as shown on drawings.

1.04 COORDINATION
- A. Coordinate all work as required.
- B. Verify work associated with lower elevation utilities are complete before placing higher elevation utilities.

PART 2 PRODUCTS

2.01 FILL MATERIALS
- A. Fill: As specified in Section 02205.

PART 3 EXECUTION

3.01 PREPARATION
- A. Identify required lines, levels, contours, and datum.
- B. Protect plant life, lawns, rock outcropping and other features remaining as a portion of final landscaping.
- C. Protect bench marks, existing structures, fences, sidewalks, paving, and curbs from excavation equipment and vehicular traffic.
- D. Maintain and protect above and below grade utilities which are to remain.
- E. Cut out soft areas of subgrade not capable of in situ compaction. Backfill with fill and compact to density equal to or greater than requirements for subsequent backfill material.

3.02 EXCAVATION
- A. Excavate subsoil required for utilities to municipal utilities.
- B. Cut trenches sufficiently wide to enable installation and allow inspection.
- C. Do not interfere with 45 degree bearing splay of foundations.
- D. Hand trim excavation. Remove loose matter.
- E. Remove lumped subsoil, boulders, and rock up to 1/3 cu yd measured by volume.
- F. Correct areas over excavated in accordance with Section 02222.
- G. Stockpile excavated material in area designated on site and remove excess material not being used, from site.

3.03 BACKFILLING
- A. Backfill trenches to contours and elevations with unfrozen materials.
- B. Systematically backfill to allow maximum time for natural settlement. Do not backfill over porous, wet, frozen or spongy subgrade surfaces.

C. Granular Fill: Place and compact materials in continuous layers not exceeding 8 inches compacted depth.
D. Soil Fill: Place and compact material in continuous layers not exceeding 8 inches compacted depth.
E. Employ a placement method that does not disturb or damage foundation perimeter drainage, conduit or pipes in trench.
F. Maintain optimum moisture content of fill materials to attain required compaction density.
G. Remove surplus fill materials from site.
H. Leave fill material stockpile areas completely free of excess fill materials.

3.04 TOLERANCES
A. Top Surface of Backfilling: Plus or minus 1 inch from required elevations.

3.05 FIELD QUALITY CONTROL
A. Field inspection and testing will be performed under provisions of the General Requirements.
B. Compaction testing will be performed in accordance with ANSI/ASTM D698.
C. If tests indicate Work does not meet specified requirements, remove Work, replace, compact, and retest at no additional cost to the owner.

3.06 PROTECTION OF FINISHED WORK
A. Protect or reshape and recompact fills subjected to vehicular traffic during construction.

END OF SECTION 02225

SECTION 02260

EXCAVATION SUPPORT AND PROTECTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY
- A. Section includes temporary excavation support and protection systems. **Contractor is responsible for all excavation support and protection systems as required by local, state, and OSHA regulations.**
- B. Related Sections:
  1. Division 1 Section "Temporary Facilities and Controls" for temporary utilities and support facilities.

1.3 PERFORMANCE REQUIREMENTS
- A. Furnish, install, monitor, and maintain excavation support and protection system capable of supporting excavation sidewalls and of resisting soil and hydrostatic pressure and superimposed and construction loads.
  1. Prevent surface water from entering excavations by grading, dikes, or other means.
  2. Install excavation support and protection systems without damaging existing buildings, structures, and site improvements adjacent to excavation.
  3. Monitor vibrations, settlements, and movements.
- B. Excavation support and protection must comply with ASHA, state and local requirements.

1.4 QUALITY ASSURANCE
- A. Preinstallation:
  1. Review methods and procedures related to excavation support and protection system including, but not limited to, the following:
     a. Geotechnical report.
     b. Existing utilities and subsurface conditions.
     c. Proposed excavations.
     d. Proposed equipment.
     e. Monitoring of excavation support and protection system.
     f. Working area location and stability.
     g. Coordination with waterproofing.
     h. Abandonment or removal of excavation support and protection system.

1.5 PROJECT CONDITIONS
- A. Interruption of Existing Utilities: Do not interrupt any utility serving facilities occupied by Owner.
- B. Survey Work: Engage a qualified land surveyor or professional engineer to survey adjacent existing buildings, structures, and site improvements; establish exact elevations at fixed points to act as benchmarks. Clearly identify benchmarks and record existing elevations.
  1. During installation of excavation support and protection systems, regularly resurvey benchmarks, maintaining an accurate log of surveyed elevations and positions for comparison with original elevations and positions. Promptly notify Architect if changes in elevations or positions occur or if cracks, sags, or other damage is evident in adjacent construction.

PART 2 - PRODUCTS

2.1 MATERIALS
- A. General: Provide materials that are either new or in serviceable condition.
- B. Shotcrete: Comply with Division 3 Section "Shotcrete" for shotcrete materials and mixes, reinforcement, and shotcrete application.
- C. Cast-in-Place Concrete: ACI 301, of compressive strength required for application.

PART 3 - EXECUTION

3.1 PREPARATION

A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards that could develop during excavation support and protection system operations.
   1. Shore, support, and protect utilities encountered.

B. Install excavation support and protection systems to ensure minimum interference with roads, streets, walks, and other adjacent occupied and used facilities.
   1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by authorities having jurisdiction.

C. Locate excavation support and protection systems clear of permanent construction so that forming and finishing of concrete surfaces are not impeded.

D. Monitor excavation support and protection systems daily during excavation progress and for as long as excavation remains open. Promptly correct bulges, breakage, or other evidence of movement to ensure that excavation support and protection systems remain stable.

E. Promptly repair damages to adjacent facilities caused by installing excavation support and protection systems.

END OF SECTION 02260

SECTION 02700

PORTLAND CEMENT CONCRETE PAVING

PART 1 GENERAL

1.01 SECTION INCLUDES
A. Concrete sidewalks, parking lot, integral curb and gutters.
B. Confirm subgrade, Gravel and Compaction prior to placing any Concrete
C. Reference and follow all recommendations, UES Geotechnical Exploration Report dated January 17, 2025

1.02 PERFORMANCE REQUIREMENTS
A. Paving: Designed for heavy duty commercial vehicles.

1.03 QUALITY ASSURANCE
A. Perform work in accordance with ACI 301, requirements of Sections 03100 and 03200.
B. Obtain cementitious materials from same source throughout.
C. Confirm subgrade Compaction prior to placing any Concrete

1.04 ENVIRONMENTAL REQUIREMENTS
A. Do not place concrete when base surface temperature is less than 40 degrees F, or surface is wet or frozen.

PART 2 PRODUCTS

2.01 FORM MATERIALS
A. Wood or Steel form material, profiled to suit conditions.
B. Joint Filler: ANSI/ASTM D1751 type; 3/4 inch thick.

2.02 REINFORCEMENT
A. Reinforcing Steel: ASTM A615; 40 or 60 ksi yield grade; deformed billet steel bars; unfinished.

2.03 CRUSHED STONE
A. Reference and follow all recommendations, Terracon GeoReport dated May 7, 2019

2.03 CONCRETE MATERIALS
A. Cement: ASTM C150 Air Entraining - Type IA Portland type, natural color.
B. Fine and Coarse Mix Aggregates: ASTM C33.
C. Water: Potable, not detrimental to concrete.
D. Air Entrainment: ASTM C260.
E. Chemical Admixture: ASTM C494, as approved by architect.

2.04 CONCRETE MIX - BY PERFORMANCE CRITERIA
A. Mix concrete in accordance with, ACI 304. Deliver concrete in accordance with ASTM C94.
B. Provide concrete to the following criteria:
   1. Compressive Strength: Reference schedule below.
   2. Slump: 4 inches.
   3. Minimum Water/Cement Ratio: 6.5 gallon/5.5 sack.
   4. Air Entrained: 5 percent maximum.
   5. Note: Fly ash is not acceptable.
C. Use accelerating admixtures in cold weather only when approved by Architect/Engineer. Use of admixtures will not relax cold weather placement requirements.
D. Use calcium chloride only when approved by Architect/Engineer.
E. Use set retarding admixtures during hot weather only when approved by Architect/Engineer.

2.05 SOURCE QUALITY CONTROL
A. Submit proposed mix design of each class of concrete to the architect and appointed testing laboratory firm for review prior to commencement of work.
B. Tests on cement and aggregates shall be performed to ensure conformance with specified requirements.

PART 3 EXECUTION

3.01 EXAMINATION
- A. Verify compacted subgrade, granular base and stabilized soil is acceptable and ready to support paving and imposed loads.
- B. Verify gradients and elevations of base are correct.

3.02 PREPARATION
- A. Moisten base to minimize absorption of water from fresh concrete.
- B. Coat surfaces of manholes, catch basins and frames with oil to prevent bond with concrete pavement.
- C. Notify Architect/Engineer minimum 24 hours prior to commencement of concreting operations.
- D. Confirm subgrade Compaction prior to placing any Concrete.
- E. Reference and follow all recommendations, Terracon GeoReport dated May 7, 2019

3.03 FORMING
- A. Place and secure forms to correct location, dimension, and profile.
- B. Assemble formwork to permit easy stripping and dismantling without damaging concrete.
- C. Place joint filler vertical in position, in straight lines. Secure to formwork during concrete placement.

3.04 REINFORCEMENT
- A. Place reinforcement at mid-height of slabs-on-grade.
- B. Interrupt reinforcement at expansion joints.
- C. Place dowels and reinforcement to achieve pavement and curb alignment as detailed.
- D. Provide doweled joints 12 inch o.c. at interruptions of concrete.

3.05 PLACING CONCRETE
- A. Place concrete in accordance with ACI 301.
- B. Ensure reinforcement, inserts, embedded parts, are not disturbed during concrete placement.
- C. Place concrete continuously between predetermined construction joints. Do not break or interrupt successive pours such that cold joints occur.
- D. Place concrete to indicated pattern.

3.06 JOINTS
- A. Place 1 inch expansion joints at locations indicated on drawings. Align curb, gutter, and sidewalk joints. Seal all expansion joints with self-leveling sealant.
- B. Where concrete abuts building provide 1/2” expansion joint with joint filler and self-leveling sealant.
- B. Place joint filler between paving components and building or other appurtenances. Recess top of filler 1/4 inch for sealant placement by Section 07900.
- C. Provide scored or sawn joints at intervals equal to sidewalk width, unless noted otherwise. Scored and sawn joints at curbs and parking lots shall be at 10 feet on-center each way.
- D. Saw cut contraction joints 3/16 inch wide at an optimum time after finishing. Cut 1/3 into depth of slab.

3.07 FINISHING
- A. Parking: Light broom.
- B. Sidewalk Paving: Light broom, radius to 1/4 inch and trowel joint edges.
- C. Handicapped Ramps: Reference ADA. Sloped sections shall have raised circular texture. Contractor may install pre-manufactured pavers or fiberglass forms in lieu of cast in place concrete.
- D. Curbs and Gutters: Trowel finish.
- E. Inclined Vehicular Ramps: Broom perpendicular to slope.
- F. Place curing compound on exposed concrete surfaces immediately after finishing. Apply in accordance with manufacturer's instructions.

3.08 FIELD QUALITY CONTROL
- A. Three sets of three concrete test cylinders shall be taken throughout the project.
- B. One additional test cylinder shall be taken during cold weather and cured on site under same conditions as concrete it represents.
- C. One slump test shall be taken for each set of test cylinders taken or as directed by owner’s representative.

3.09 PROTECTION

A. Immediately after placement, protect pavement from premature drying, excessive hot or cold temperatures, and mechanical injury.

3.10 SCHEDULES

A. Concrete sidewalks and integral curb and gutter: 4,000 psi 28 day concrete, 4 inches thick, natural color Portland cement, broom finish, detectable warnings per ADA at ramps and curb cuts.

B. Concrete integral curb and gutter: 4,000 psi 28 day concrete, thickness and reinforcing per drawings, natural color Portland cement, broom finish, detectable warnings per ADA at ramps and curb cuts.

C. Concrete Grandstand Slab: 4,000 psi 28 day concrete, 6 inches thick, reinforced with 6x6 W4xW4 WWF, natural color, Portland cement, broom finish, over 4” of crushed gravel.

END OF SECTION 02700

SECTION 02830

GALVANIZED CHAIN LINK FENCE AND GATES

PART 1 GENERAL

1.01 SECTION INCLUDES
- A. Fence framework, fabric, and accessories. Height approximately 8'-0", match existing.
- B. Concrete anchorage for posts and center drop for gates.
- C. Manual gates and related hardware.

1.02 QUALITY ASSURANCE
- A. Manufacturer: Company specializing in commercial quality chain link fencing with two years experience.
- B. Installation: ANSI/ASTM F567.

1.03 SHOP DRAWINGS AND PRODUCT DATA
- A. Submit shop drawings and product data for approval.
- B. Include plan layout, grid, and spacing of components, accessories, fittings, hardware, anchorages, and schedule of components.
- C. Submit manufacturer's installation instructions.

PART 2 PRODUCTS

2.01 MATERIALS
- A. Framework: ASTM A120; Schedule 40 steel pipe, standard weight, one piece without joints, or to match existing.
- B. Fabric: FS RR-F-91 Type I – zinc coated steel. 2.0-inch diamond mesh steel wire, interwoven, 9-gage thick, top selvage twisted tight, bottom selvage knuckle and closed. Fabric will be installed at entire perimeter.
- C. Line Posts: 2 3/8"- diameter steel pipe. Posts shall be approximately 11'-0" in overall length. Posts shall be spaced at 10' maximum on center.
- D. Terminal Posts: 2 7/8" diameter pipe. Posts shall be approximately 11'-0" in overall length.
- E. Top Rail, Mid Rail, Bottom Rail, and Knee Brace: 1 5/8" diameter pipe.
- F. Top, Roof and Brace Rail: 3.5-inch diameter, plain end, sleeve coupled steel pipe.
- G. Gate Frame and Track: 2 7/8" diameter steel pipe for welded fittings. Provide commercial grade rolling gate with hard rubberized wheels. Provide all heavy duty hardware and track capable of supporting gate. Concrete base for roller type carrier.
- H. Caps: Cast steel or malleable iron, galvanized sized to post dimension, set screw retained.
- I. Fittings: Sleeves, bands, clips, rail ends, tension bars, fasteners and fittings: Steel.
- J. Tension Wire: 6 gage steel, single strand.
- I. Gate Hardware: Latch with gravity drop, type required for rolling gate assembly, hardware for padlock. Provide heavy duty rolling castors to support 10'-12' wide rolling gate.

2.02 FINISHES
- A. Galvanized: ANSI/ASTM A123; 1.8 oz/sq.ft. coating.
- B. Accessories: Same finish as framing.

PART 3 EXECUTION

3.01 INSTALLATION
- A. Install framework, fabric, accessories, and gates in accordance with ANSI/ASTM F567.
- B. Set posts minimum 30" deep in concrete (3000 psi) footing (± 10" dia x 3'-0" deep).
- C. Provide top rail through line post tops and splice with 7-inch long rail sleeves.
- D. Brace each gate and corner post back to adjacent line post with horizontal center brace rail and diagonal truss rods. Install brace rail, one bay from end and gate posts.

E. Install center and bottom brace rail on corner and gate leaves.
F. Stretch fabric between terminal posts.
G. Position bottom of fabric 2 inches above finished floor.
H. Fasten fabric to top rail, line posts, braces, and at bottom tension wire (and roof) with wire ties maximum 15 inches on center.
I. Attach fabric to end, top, corner, and gateposts with tension bars and tension bar clips.
J. Install gates with fabric to match fence. Install heavy duty rolling gate hardware and wheeled carrier.

END OF SECTION 02830

SECTION 07900

JOINT SEALERS

PART 1 GENERAL

1.01 SECTION INCLUDES
- A. Preparing substrate surfaces.
- B. Sealant and joint backing.

1.02 QUALITY ASSURANCE
- A. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
- B. Perform acoustical sealant application work in accordance with ASTM C919.

1.03 QUALIFICATIONS
- A. Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum three years documented experience.
- B. Applicator: Company specializing in performing the work of this section with minimum years documented experience.

1.04 WARRANTY
- A. Provide five year warranty.
- B. Warranty: Include coverage for installed sealants and accessories which fail to achieve air tight seal, water tight seal, and exhibit loss of adhesion or cohesion, or do not cure.

PART 2 PRODUCTS

2.01 SEALANTS
- A. Bituminous Based (Paving): Single component, asphalt compound, elongation capability of 0 to 2 percent of joint width.

2.02 ACCESSORIES
- A. Primer: Non-staining type, recommended by sealant manufacturer to suit application.
- B. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.
- C. Joint Backing: ASTM D1056; round, closed or open cell polyethylene foam rod; oversized 30 to 50 percent larger than joint width.
- D. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.

PART 3 EXECUTION

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

3.02 PREPARATION
- A. Remove loose materials and foreign matter which might impair adhesion of sealant.
- B. Clean and prime joints in accordance with manufacturer's instructions.
- C. Perform preparation in accordance with manufacturer's instructions.
- D. Protect elements surrounding the work of this section from damage or disfiguration.

3.03 INSTALLATION
- A. Install sealant in accordance with manufacturer's instructions.
- B. Measure joint dimensions and size materials to achieve required 2:1 width/depth ratios.
- C. Install joint backing to achieve a neck dimension no greater than 1/3 of the joint width.
- D. Install bond breaker where joint backing is not used.
- E. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.
- F. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.

3.04 SCHEDULE

A. Paving; Caulk as required to seal or fill gaps, expansion joints, and cracks to make transitions watertight and/or visually tight.

END OF SECTION 07900